PRX THE PROEXPORTER NETWORK®

Optimum Locations for Future Value-Added Corn Processing Facilities in Iowa (by ASD)

This report is part of "Assessment of Iowa's Potential for Value-Added Processing; Optimum Locations for Future Ethanol and Value-Added Corn Processing Facilities," according to PRX Proposal of May 1, 2001, submitted to Iowa Corn Board and Iowa Department of Agriculture and Land Stewardship, Office of Renewable Fuels. The principal author is William J. Hudson, 11770 Cherry Lane, Olathe, KS 66061.

Referenced reports:

IA_CMZA.pdf, showing map of state and estimated truck origination patterns of major processors and barge stations, 99-00.

PRX_FSRmethod.pdf, explaining how the PRX corn data system works.

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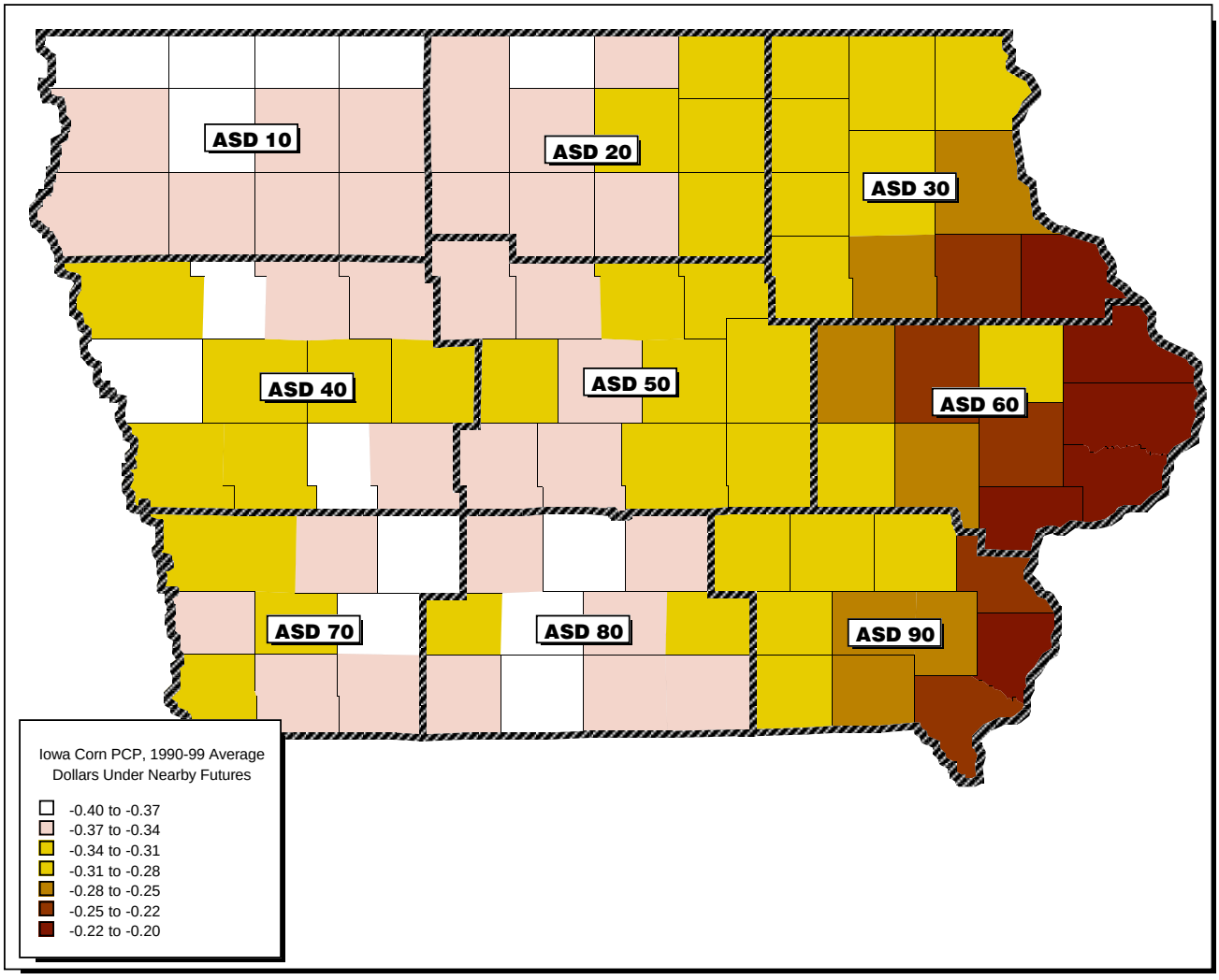
Summary

This report uses USDA Posted County Prices (PCPs) for the past ten years, converted to basis levels using the nearby futures prices of the Chicago Board of Trade. The daily basis levels were averaged by month, the months were averaged by crop years, and the average of the crop years from 1990 to 1999 was calculated—as shown on the map below. The higher basis levels are in the east of Iowa (near to major existing processors and to River export demand), and the lower basis levels in the west.

The next step was to develop supply-demand tables for each ASD (see Table of Contents on first page), and to correlate these and other general supply-demand factors against the basis history from the PCP analysis. Good models were found, and the method for these is described on page 11. With the models in hand, the next step was to increase the processing by various amounts in each ASD and note the impact on the basis. The results of this analysis is shown in the table and chart on page 3.

The range of corn basis levels across the state, mainly from east to west, is about 20 cents, and the basis impacts of additional processing is much stronger in the east than in the west. Stronger impacts will be felt the closer one comes to the actual plant, and PRX studies of single plants with, say, two counties, can show an impact of 10 cents or more. But this does not extend for hundreds of miles.

The RFP asked the question whether different types of value-added operations would have different basis impact effects. In our opinion, the amount of corn used at a given location is the main driving factor, not the way in which it is used, at least in terms of corn price itself.

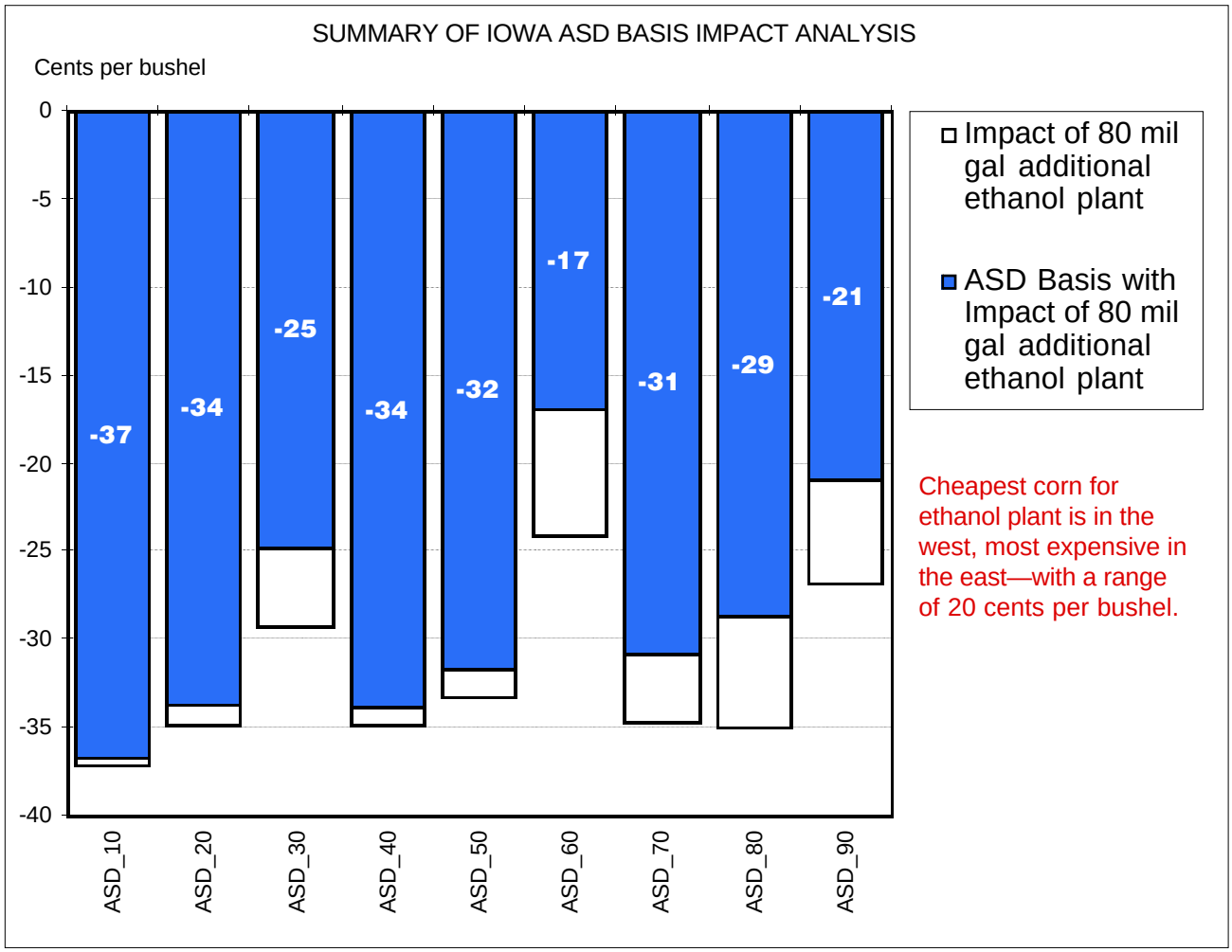


SUMMARY OF IOWA ASD BASIS IMPACT ANALYSIS

PRXfile:IA_ASD10model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

ASD	ASD Basis* Nearby Futures actual 99-00 avg	ASD Basis Impact with Additional Processing Million Gallons 10	18	40	80	ASD Basis with Additional Processing Million Gallons 10	18	40	80
		Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1	Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
10	-37.10	0.04	0.07	0.17	0.33	-37.06	-37.03	-36.93	-36.77
20	-34.80	0.14	0.25	0.57	1.13	-34.66	-34.55	-34.23	-33.67
30	-29.20	0.54	0.98	2.17	4.35	-28.66	-28.22	-27.03	-24.85
40	-34.80	0.12	0.22	0.49	0.98	-34.68	-34.58	-34.31	-33.82
50	-33.20	0.19	0.33	0.74	1.48	-33.01	-32.87	-32.46	-31.72
60	-24.10	0.90	1.62	3.60	7.20	-23.20	-22.48	-20.50	-16.90
70	-34.70	0.48	0.87	1.94	3.88	-34.22	-33.83	-32.76	-30.82
80	-35.00	0.80	1.44	3.19	6.39	-34.20	-33.56	-31.81	-28.61
90	-26.80	0.74	1.34	2.97	5.94	-26.06	-25.46	-23.83	-20.86

*Calculated from USDA PCPs, 1990-99 average



Method

This report uses an independent system of corn analysis developed by PRX and fully described in the report, "New Method for Corn Feed Use Estimation," July 2000, which is included on the CD with this Iowa ASD analysis. Click on PRX_FSRmethod.pdf.

Basically, PRX maintains its own estimates of processor usage by site and by state, PRX calculates feed usage by county, ASD, and state using reported USDA animal numbers and other data and also using a PRX formula for Grain Consuming Animal Units (GCAUs) and High Protein Consuming Animal Units (HPCAUs). Combining these factors with USDA production and stocks permits the calculation of state by state (and by sub-state regions of choice) corn supply-demand tables, which show the Net Exports/Net Imports of all reporting states of the country. This system "adds up" to the US corn table shown below. The Iowa table is shown on page 5.

For allocating processor use by ASD, PRX used its exclusive satellite-based Commodity Market Zone Analysis (CMZA) sotware, developed in conjunction with NASA's Space Remote Sensing Center in the early 1990s. This entire methodology has been applied in many dozens of analyses over the past decade, plants have been built on its findings, and the results have been very satisfactory. Click on IA_CMZA.pdf.

In the case of Iowa, note the chart on page 5, showing the corn use in the state by three major categories. Although processing has increased very substantially over time, the Net Exports from Iowa remain very large, and the changes in Net Exports (i.e, corn leaving Iowa for use in other states or for shipment to foreign) have much to do with the changes in corn basis levels from year to year. As shown on pages 14 and 15, Iowa's basis levels are considerable below those of Illinois, and thus much of Iowa's Net Exports move east toward the River and the major Illinois processors. Some of this is by truck, and some by rail.

UNITED STATES CORN SUPPLY-DEMAND DETAIL

PRXfile:US_FarmPrice_Corn. PRXrev. 21-May-01. USDA: Jun-01.

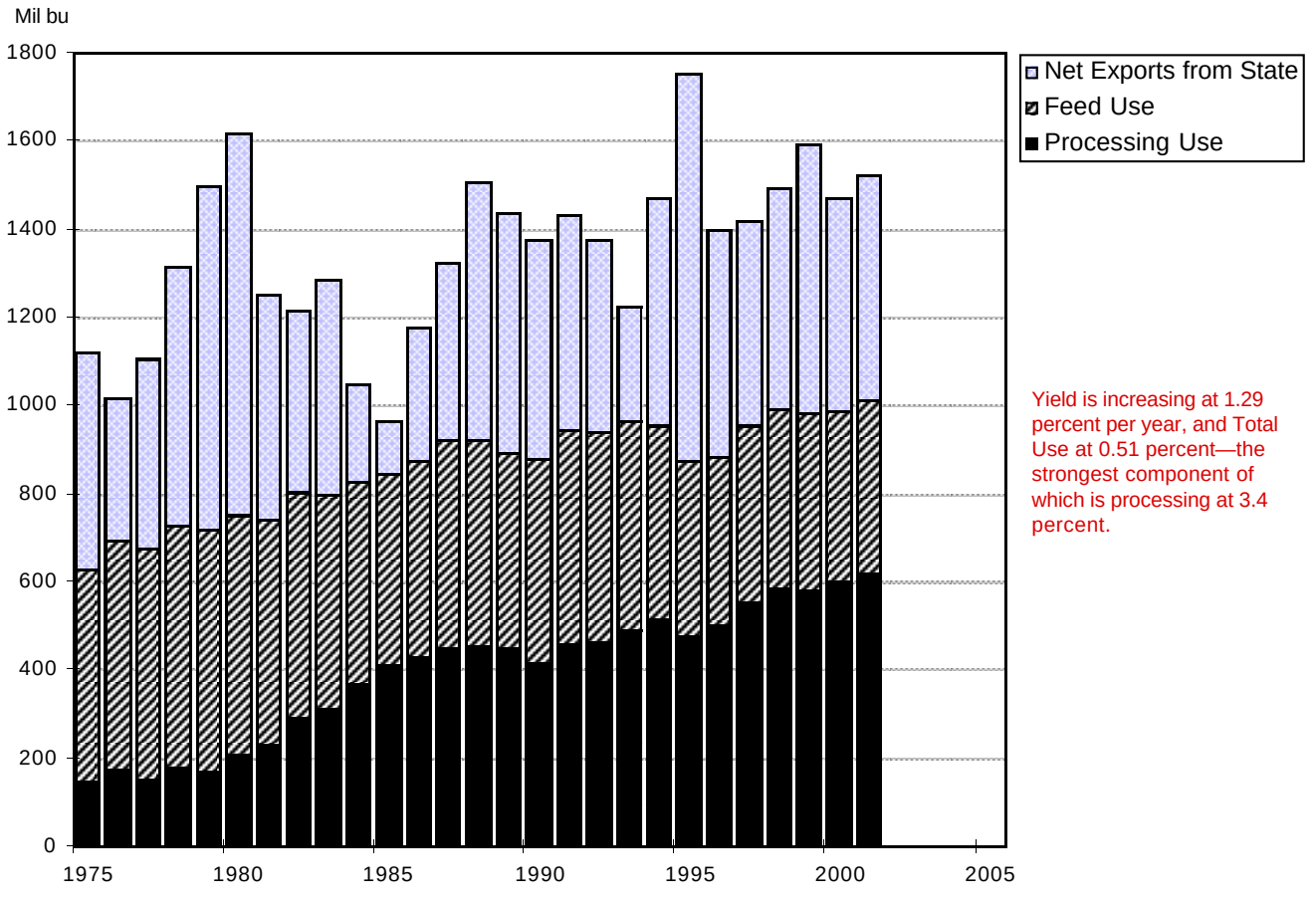
Item	Unit	Crop year (Sep-Aug)										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
Carry-in	*mil bu*	1344	1521	1100	2113	850	1558	426	883	1308	1787	1718
Area planted	*thou ac*	74166	75957	79311	73239	78921	71479	79229	79537	80187	77386	79545
Area harvested	*thou ac*	66952	68822	72077	62933	72514	65210	72644	72671	72589	70487	72732
Yield	*bu/ac*	119	109	132	101	139	114	127	127	134	134	137
Production	*mil bu*	7934	7475	9477	6338	10051	7400	9233	9207	9759	9431	9968
Supply	*mil bu*	9282	9017	10580	8470	10910	8974	9671	10100	11085	11233	11696
Carry-out	*mil bu*	1521	1100	2113	850	1558	426	883	1308	1787	1718	2114
Disappearance (Use)	*mil bu*	7761	7916	8467	7620	9352	8548	8788	8792	9299	9515	9582
Residual use	*mil bu*	803	596	927	408	1028	133	960	883	678	843	883
Feed use in state	*mil bu*	3827	4222	4338	4293	4453	4579	4341	4622	4816	4824	4879
of which,	*mil bu*											
Dairy	*mil bu*	585	606	625	633	659	669	681	710	749	745	736
Beef cattle	*mil bu*	1063	1161	1257	1155	1216	1381	1207	1296	1355	1426	1491
Hogs	*mil bu*	1074	1217	1173	1200	1217	1167	1078	1195	1220	1183	1183
Poultry	*mil bu*	1010	1142	1180	1207	1266	1255	1276	1318	1384	1365	1362
Other	*mil bu*	95	97	101	96	102	106	98	103	108	106	107
Processing in state	*mil bu*	1405	1514	1542	1592	1694	1607	1693	1784	1826	1911	1968
Total use in state	*mil bu*	7761	7916	8467	7620	9352	8548	8788	8792	9299	9515	9582
Net leaving state	*mil bu*	1726	1584	1660	1327	2177	2229	1794	1503	1979	1937	1852

IOWA CORN SUPPLY-DEMAND DETAIL

PRXfile:IA_FarmPrice_Corn. PRXrev. 28-Jun-01. USDA: Jun-01.

Item	Unit	Crop year (Sep-Aug)										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
Carry-in	*mil bu*	329	357	239	583	185	434	83	217	285	440	448
Area planted	*thou ac*	12800	12500	13200	12000	12900	11900	12700	12200	12500	12100	12300
Area harvested	*thou ac*	12400	12200	12950	11000	12600	11600	12400	11900	12200	11800	12000
Yield	*bu/ac*	126	117	147	80	152	123	138	138	145	149	145
Production	*mil bu*	1562	1427	1904	880	1915	1427	1711	1642	1769	1758	1740
Supply	*mil bu*	1892	1785	2143	1463	2100	1861	1794	1859	2054	2198	2188
Carry-out	*mil bu*	357	239	583	185	434	83	217	285	440	448	566
Disappearance (Use)	*mil bu*	1534	1546	1560	1278	1666	1778	1577	1574	1615	1750	1622
Residual use	*mil bu*	158	113	186	56	196	26	178	157	123	157	154
Feed use in state	*mil bu*	464	489	478	476	439	393	385	405	404	401	388
of which,	*mil bu*											
Dairy	*mil bu*	22	23	23	24	20	21	21	21	21	20	20
Beef cattle	*mil bu*	117	104	104	108	103	88	110	109	111	118	114
Hogs	*mil bu*	304	336	322	316	293	253	217	235	229	221	210
Poultry	*mil bu*	17	22	25	26	27	28	33	35	39	39	42
Other	*mil bu*	4	3	3	3	3	3	3	3	3	3	3
Processing in state	*mil bu*	416	457	461	490	515	479	500	551	587	581	601
Total use in state	*mil bu*	1038	1060	1125	1023	1150	897	1063	1113	1113	1139	1143
Net leaving state	*mil bu*	496	486	435	256	516	881	515	461	501	611	479

IOWA CORN TOTAL USE BY MAJOR SECTOR LONG-TERM



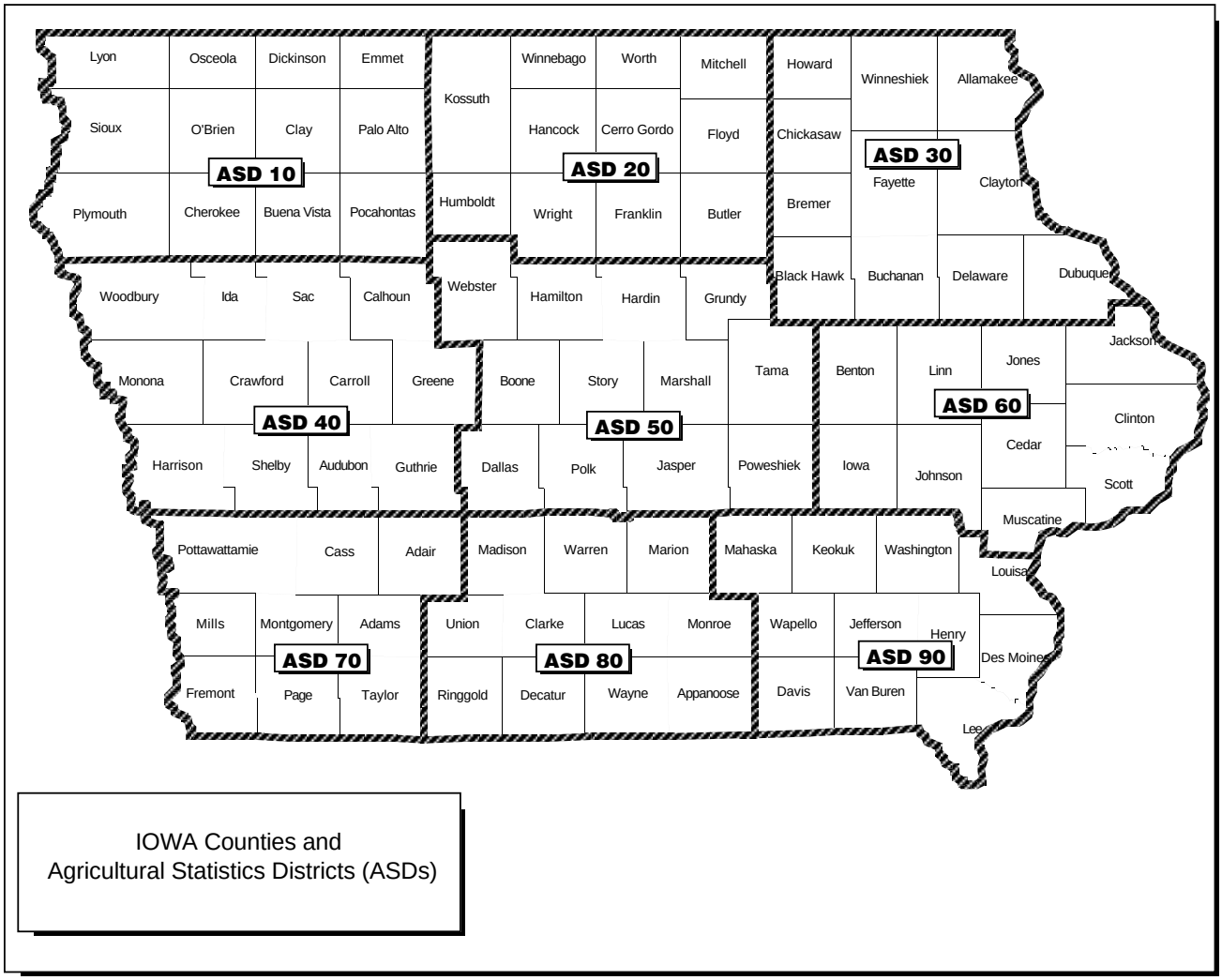
Yield is increasing at 1.29 percent per year, and Total Use at 0.51 percent—the strongest component of which is processing at 3.4 percent.

Method, continued

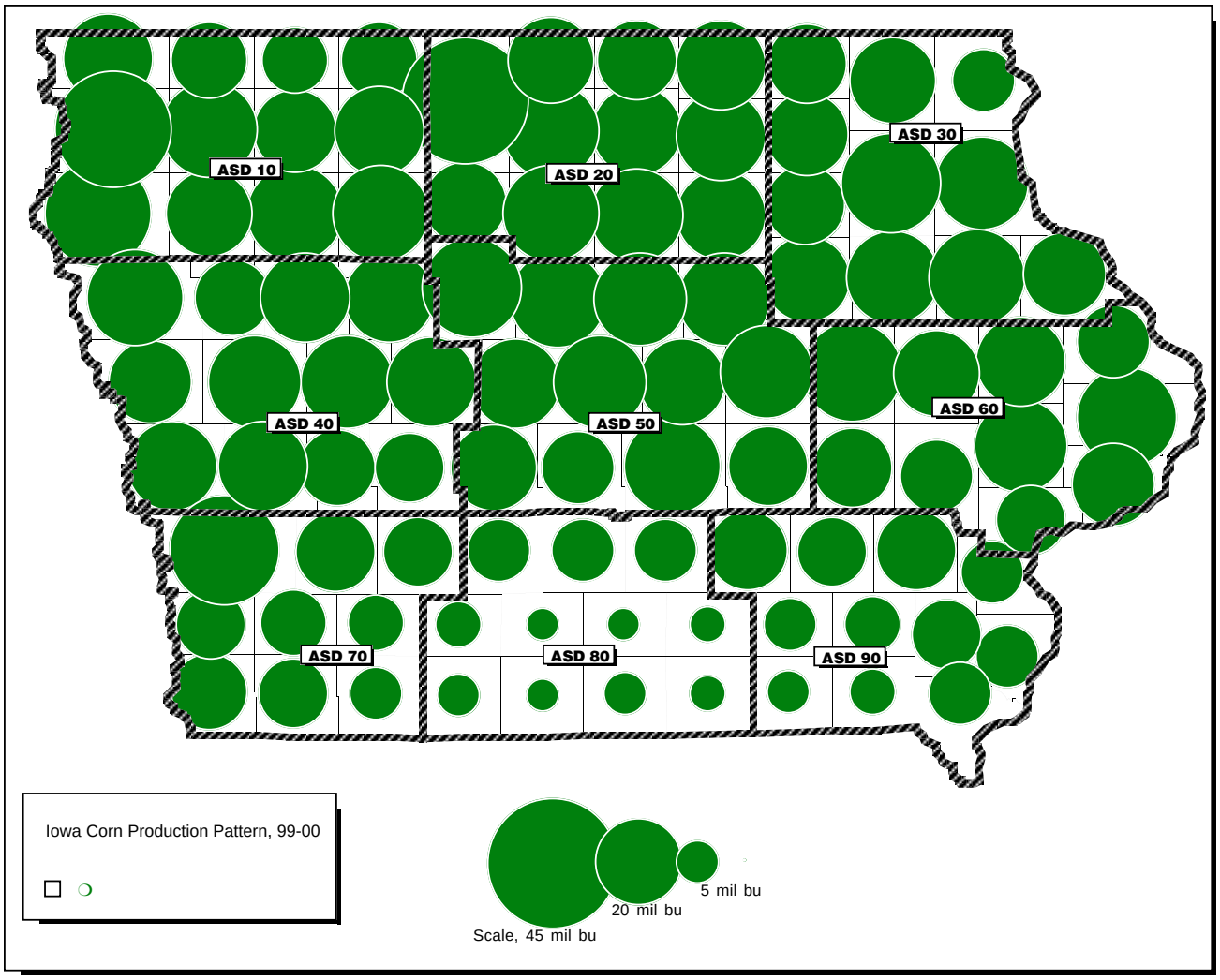
The procedures mentioned at the US and state level are conducted at the county level, and then the ASDs are constructed from the appropriate counties. The map below shows the county structure of the ASDs, and the maps on pages 7, 8, and 9 show the production and feed use pattern of the state.

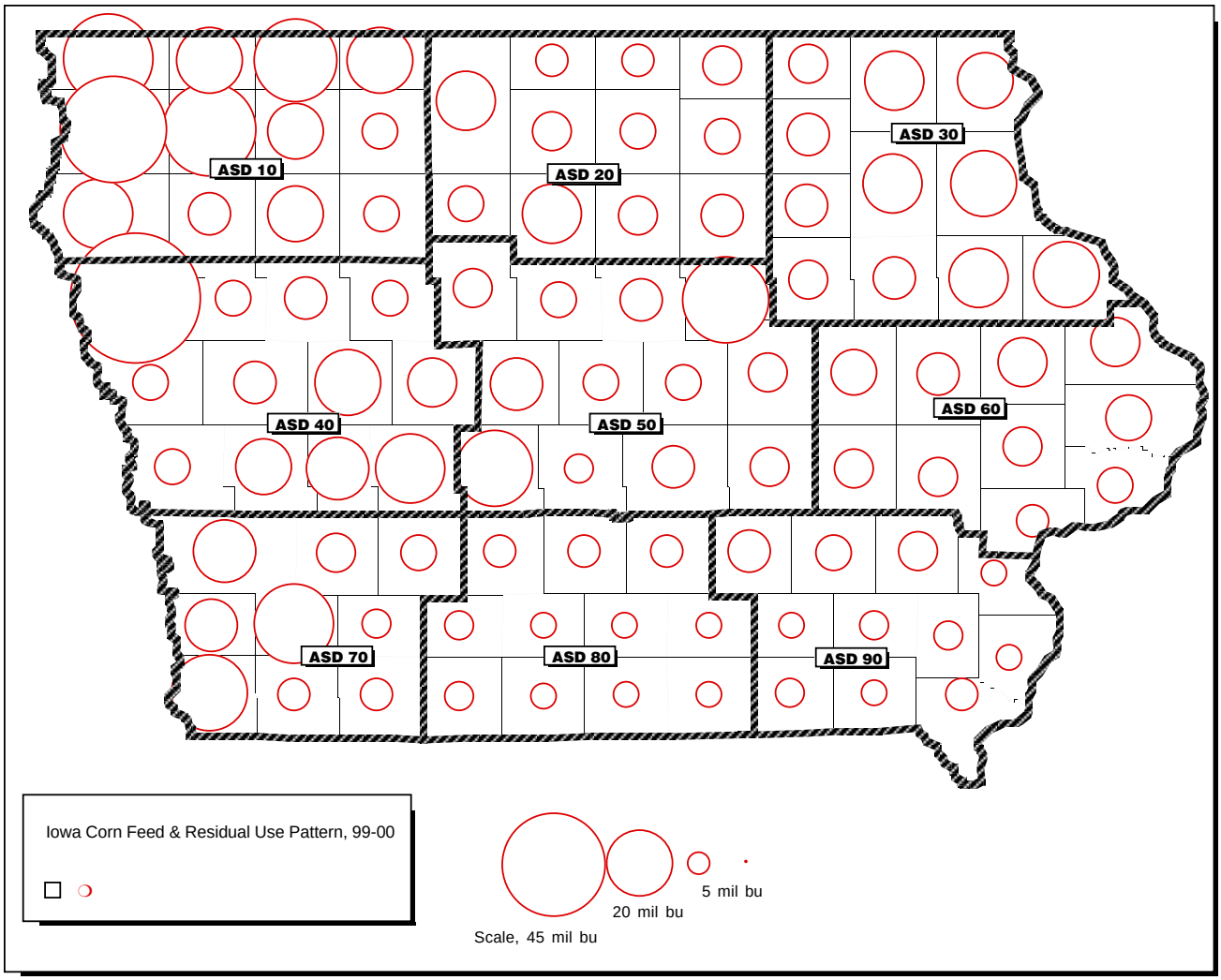
The full corn supply-demand for an ASD, specifically #10, is shown on page 10. The technique for allocating processing use and barge shipments from the ASDs relies on the PRX CMZA mapping software, and a separate electronic file is appended in color, IA_CMZA.pdf, which the reader will find on the submitted CD.

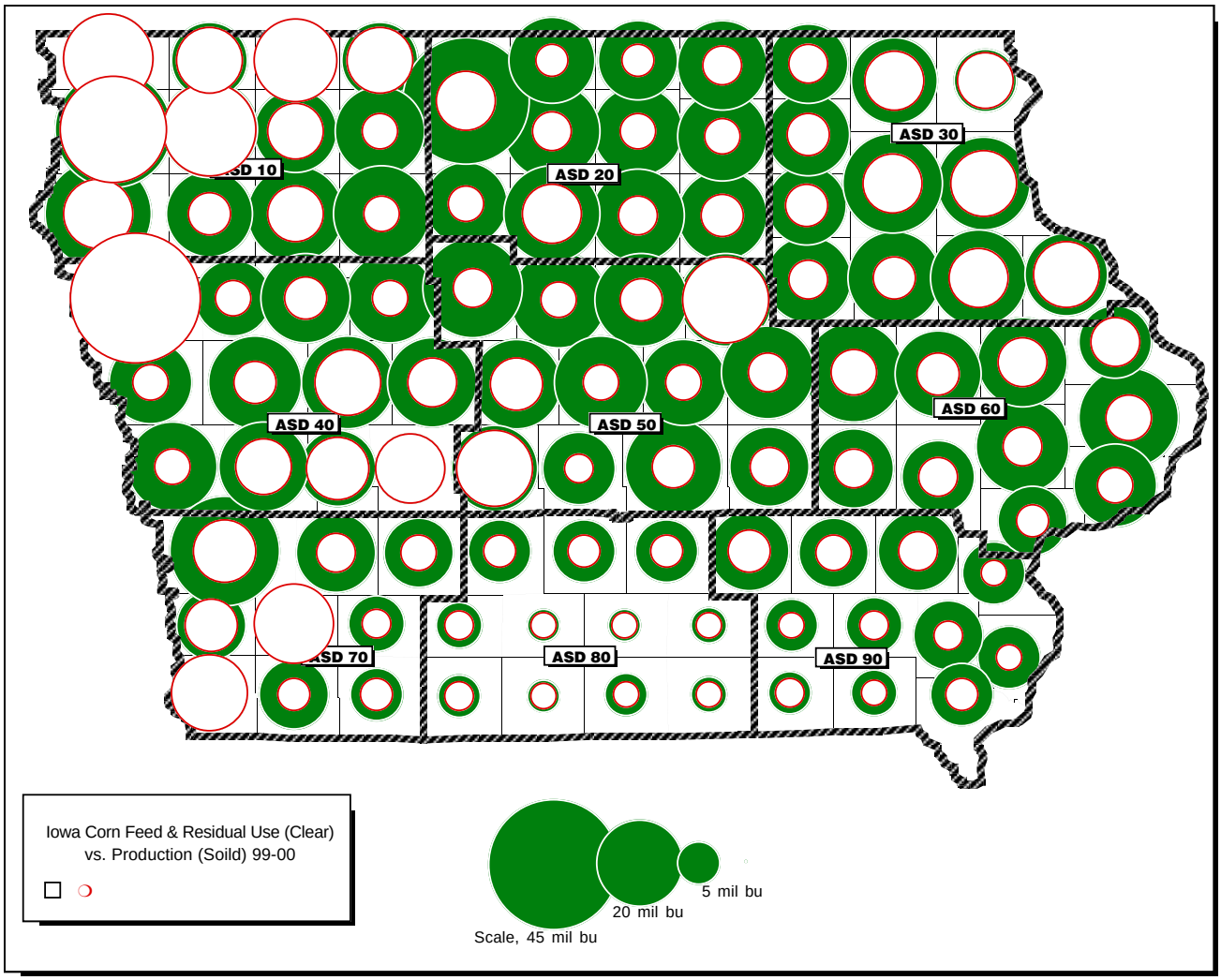
Once the ASD supply-demand tables are complete, the next step is developing regression models for each ASD, and the method is discussed on page 11.



IOWA Counties and
Agricultural Statistics Districts (ASDs)







IA_ASD10 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD10. PRXrev. 23-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD10	Carry-in*	48	53	34	82	27	70	13	32	45	74	69
CORN	Production**	227	210	274	124	284	230	260	244	279	295	268
	Supply	275	263	308	206	312	299	273	276	324	369	337
	Carry-out	52	35	84	26	64	13	33	42	69	75	87
	Disappearance	223	228	224	180	247	286	240	234	255	294	250
	Residual Use***	23	17	27	8	29	5	28	23	19	26	23
	Feed Use****	73	77	75	74	69	61	60	85	86	87	84
	Industrial Use*****	0	0	0	0	0	0	0	0	0	0	0
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	96	93	102	82	98	66	87	109	104	113	107
	Net Exports (- = imports)	127	134	123	97	149	220	152	125	150	180	142
	Carryout pct Total Use	54%	38%	82%	32%	66%	20%	38%	39%	66%	66%	81%
IA_ASD10	Carry-in*	10	14	12	13	8	14	8	6	9	16	12
SOYBEANS	Production**	60	64	64	39	78	73	76	79	83	82	76
	Supply	70	78	76	52	86	87	85	85	93	98	88
	Carry-out	14	12	16	6	14	8	6	9	15	13	11
	Disappearance	56	66	60	45	72	79	78	76	77	85	77
	Seed & Residual Use	3	3	3	2	4	3	4	4	6	4	5
	Crush*****	29	31	31	31	34	34	36	49	53	47	49
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	31	34	35	33	38	38	40	54	58	51	53
	Net Exports (- = imports)	24	32	26	12	34	41	39	22	19	33	24
	Carryout pct Total Use	46%	35%	46%	19%	36%	21%	16%	17%	26%	25%	20%

*Each county allocated stocks proportional to its share of state production

Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.

PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter;

Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
10	Iowa	IA			

Regression Models Explaining Annual Average Corn Basis
Iowa ASD Regions

Models for all nine ASDs have been developed, all with very credible R-squares.

Four Independent variables were selected.

1. The national average corn government loan rate. This has a positive coefficient because it offers the producer an alternative to marketing his corn. Specifically, a higher loan rate has a bullish impact on the corn basis price. Starting with the 1996 crop year, when Freedom To Farm legislation instituted the marketing loan, the model uses a $1.00 loan rate since the loan program's effect is not to cause the producer to compare the loan rate to the market price but rather to try to maximize the marketing loan gain.
2. The January-July high in July corn futures. This has a positive coefficient because it is a proxy for late season tightness in corn availability. The higher the price, the harder it is to originate corn and this is bullish on the basis.
3. The ratio of total grain in Iowa to the total elevator space available. This has a negative coefficient because the higher the ratio more competition for space which is bearish the basis.
4. Regional net corn exports. This has a positve coefficient because it represents demand. The greater the exports, the more demand there is for corn and this is bullish the basis. There is an anomaly in the ASD Region 10 and ASD Region 30 models where the coefficient is negative. At this time we have no explanation, but it may be that, in these areas, corn has had to buy in demand more agressively than in the other 7 regions.

IOWA ASD10 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD10model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	127	80%	2.69	1.55	-35.0	-37.23				
91-92	134	81%	2.85	1.62	-36.0	-35.69				
92-93	123	94%	2.49	1.72	-35.0	-38.87				
93-94	97	68%	3.19	1.72	-35.0	-30.22				
94-95	149	100%	3.00	1.89	-35.0	-34.91				
95-96	220	88%	5.55	1.89	-17.0	-16.66				
96-97	152	88%	3.21	1.00	-34.0	-40.22				
97-98	125	93%	2.95	1.00	-43.0	-42.37				
98-99	150	100%	2.40	1.00	-50.0	-47.38				
99-00	180	107%	2.58	1.00	-51.0	-47.45	-47.41	-47.38	-47.28	-47.12
00-01	142	105%	2.47	1.00						
						Impact:	0.04	0.07	0.17	0.33

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.94
R Square	0.88
Adjusted R Square	0.78
Standard Error	4.51
Observations	10.00

ANOVA

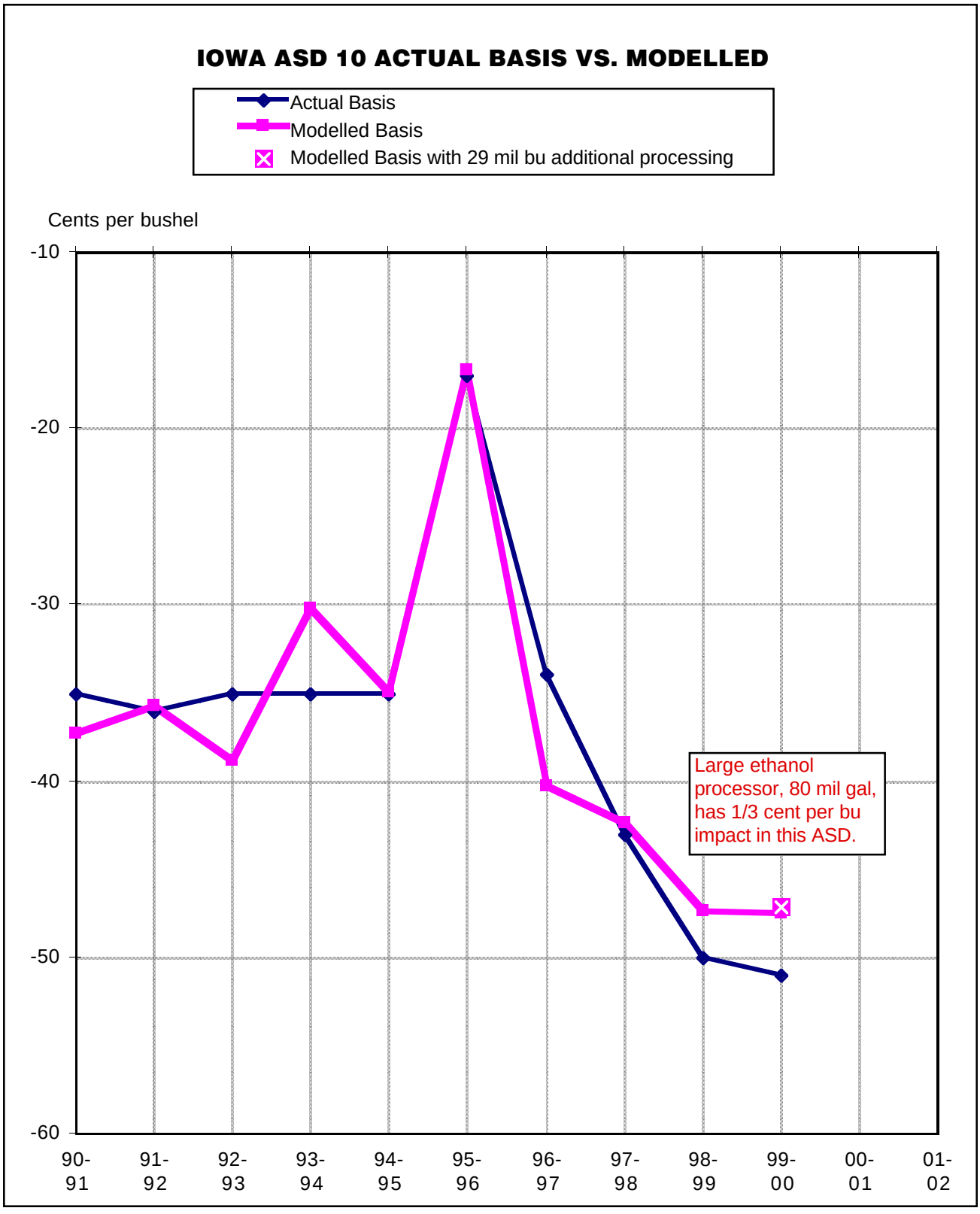
	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	725.37852	181.34463	8.9313426	0.0168644
Residual	5	101.52148	20.304297		
Total	9	826.9			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-57.7150	20.7819	-2.7772	0.0390	-111.1364	-4.2935	-111.1364	-4.2935	*b*
Corn Exports	-0.0114	0.1154	-0.0991	0.9249	-0.3080	0.2852	-0.3080	0.2852	*ne*
Storage Ratio	-13.7273	25.7870	-0.5323	0.6173	-80.0147	52.5601	-80.0147	52.5601	*gs*
Corn Price	6.8320	4.1005	1.6661	0.1566	-3.7087	17.3727	-3.7087	17.3727	*jj*
Loan Rate	9.3839	4.6726	2.0083	0.1009	-2.6274	21.3952	-2.6274	21.3952	*ln*

RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-37.2253	2.2253
2	-35.6926	-0.3074
3	-38.8725	3.8725
4	-30.2238	-4.7762
5	-34.9137	-0.0863
6	-16.6564	-0.3436
7	-40.2177	6.2177
8	-42.3718	-0.6282
9	-47.3761	-2.6239
10	-47.4502	-3.5498

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*



IA_ASD20 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD20. PRXrev. 23-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD20	Carry-in*	48	44	35	71	26	69	12	32	42	63	68
CORN	Production**	230	177	277	108	267	226	255	243	262	250	264
	Supply	278	221	311	179	293	295	267	274	304	313	332
	Carry-out	53	30	85	23	61	13	32	42	65	64	86
	Disappearance	226	191	227	156	233	282	235	232	239	249	246
	Residual Use***	23	14	27	7	28	5	27	23	18	22	23
	Feed Use****	50	53	51	51	47	41	40	36	36	35	33
	Industrial Use*****	0	0	0	0	0	0	0	0	0	0	0
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	73	67	78	58	74	46	67	59	53	57	56
	Net Exports (- = imports)	153	124	148	99	158	236	168	173	186	192	190
	Carryout pct Total Use	72%	44%	108%	39%	81%	29%	48%	71%	122%	112%	152%
IA_ASD20	Carry-in*	9	12	9	11	6	12	6	5	8	12	11
SOYBEANS	Production**	52	51	51	32	61	62	58	65	72	65	69
	Supply	60	63	61	42	67	74	65	70	80	78	80
	Carry-out	12	10	13	5	11	7	5	8	13	10	10
	Disappearance	48	53	48	37	56	67	60	62	67	68	70
	Seed & Residual Use	2	2	3	2	3	3	3	3	5	3	4
	Crush*****	33	35	35	35	39	39	41	42	36	32	33
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	35	37	38	37	42	42	44	46	41	36	38
	Net Exports (- = imports)	13	16	10	0	14	25	16	17	26	32	32
	Carryout pct Total Use	36%	26%	33%	14%	26%	16%	11%	17%	32%	29%	26%

*Each county allocated stocks proportional to its share of state production
Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.
PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter;
Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
20	Iowa	IA			

IOWA ASD20 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD10model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	153	80%	2.69	1.55	-33.0	-33.70				
91-92	124	81%	2.85	1.62	-34.0	-33.49				
92-93	148	94%	2.49	1.72	-33.0	-36.96				
93-94	99	68%	3.19	1.72	-32.0	-28.14				
94-95	158	100%	3.00	1.89	-33.0	-33.59				
95-96	236	88%	5.55	1.89	-14.0	-13.25				
96-97	168	88%	3.21	1.00	-31.0	-37.95				
97-98	173	93%	2.95	1.00	-41.0	-40.51				
98-99	186	100%	2.40	1.00	-48.0	-44.90				
99-00	192	107%	2.58	1.00	-49.0	-45.51	-45.37	-45.26	-44.94	-44.38
00-01	190	105%	2.47	1.00						
						Impact:	0.14	0.25	0.57	1.13

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.94
R Square	0.88
Adjusted R Square	0.79
Standard Error	4.53
Observations	10.00

ANOVA

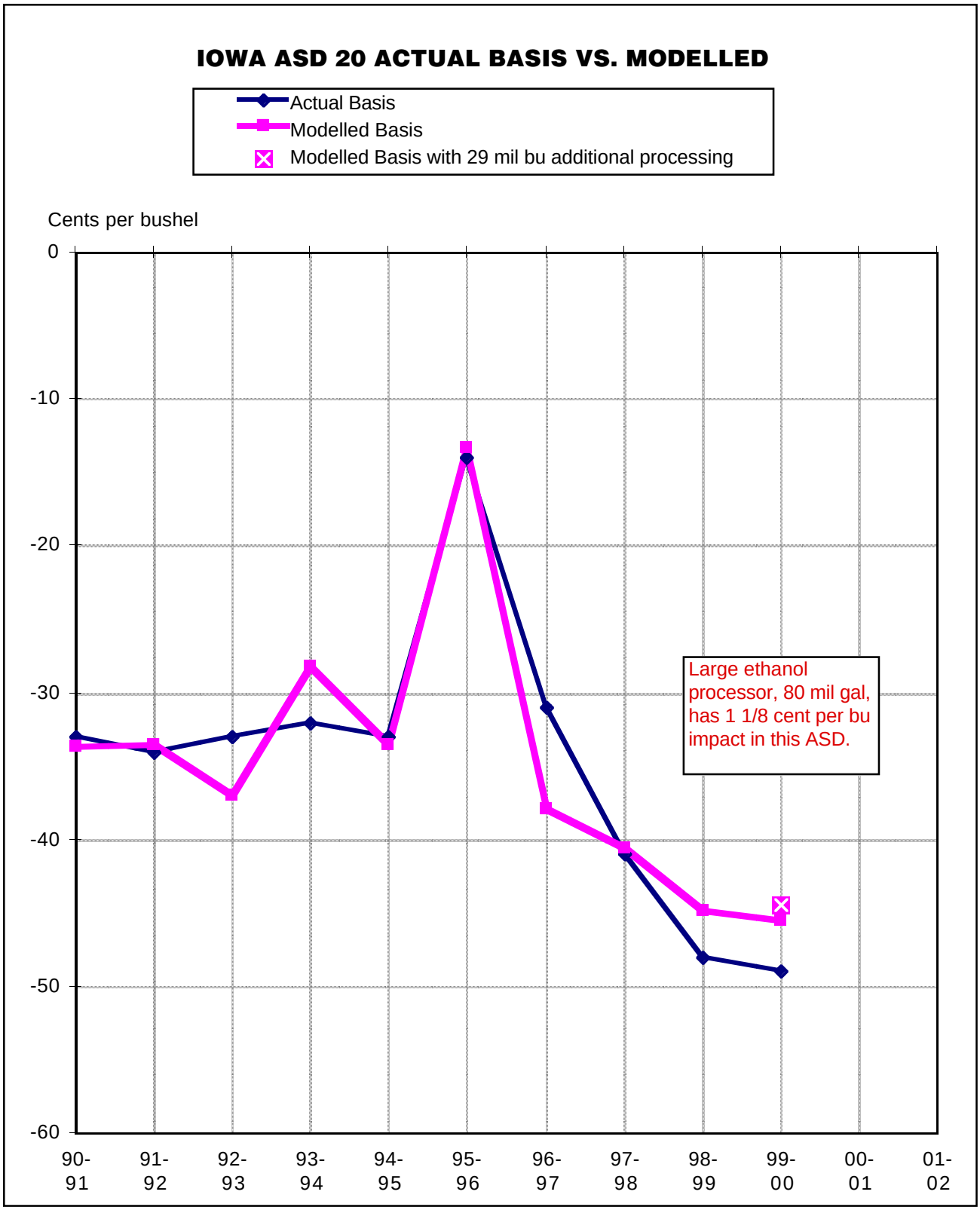
	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	777.05101	194.26275	9.4717045	0.0148909
Residual	5	102.54899	20.509799		
Total	9	879.6			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-49.3159	20.2812	-2.4316	0.0593	-101.4503	2.8185	-101.4503	2.8185	*b*
Corn Exports	0.0389	0.1217	0.3197	0.7621	-0.2739	0.3517	-0.2739	0.3517	*ne*
Storage Ratio	-26.3241	29.9340	-0.8794	0.4194	-103.2717	50.6236	-103.2717	50.6236	*gs*
Corn Price	5.5477	4.4695	1.2412	0.2696	-5.9414	17.0368	-5.9414	17.0368	*jj*
Loan Rate	10.1917	5.7490	1.7728	0.1365	-4.5866	24.9701	-4.5866	24.9701	*ln*

RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-33.7035	0.7035
2	-33.4936	-0.5064
3	-36.9603	3.9603
4	-28.1385	-3.8615
5	-33.5888	0.5888
6	-13.2493	-0.7507
7	-37.9466	6.9466
8	-40.5107	-0.4893
9	-44.8990	-3.1010
10	-45.5097	-3.4903

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*



IA_ASD30 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD30. PRXrev. 23-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD30	Carry-in*	42	48	28	72	21	56	10	27	37	55	54
CORN	Production**	199	193	222	108	221	183	210	201	229	218	208
	Supply	241	241	250	179	243	239	220	228	265	273	261
	Carry-out	46	32	68	23	50	11	27	35	57	56	68
	Disappearance	196	209	182	157	192	229	194	193	209	217	194
	Residual Use***	20	15	22	7	23	4	22	19	15	19	18
	Feed Use****	91	96	94	94	86	79	79	63	63	61	59
	Industrial Use*****	32	35	36	39	38	36	38	44	45	47	49
	Barge Ldngs UpMS	62	62	44	41	65	94	53	49	71	69	62
	Total Use	206	208	196	181	213	212	191	176	194	196	189
	Net Exports (- = imports)	-10	1	-14	-24	-20	17	2	17	14	21	5
	Carryout pct Total Use	22%	16%	35%	13%	24%	5%	14%	20%	29%	28%	36%
IA_ASD30	Carry-in*	3	5	4	6	3	6	3	3	5	9	8
SOYBEANS	Production**	20	22	21	17	29	30	31	39	44	45	46
	Supply	24	27	25	23	32	36	35	42	49	54	53
	Carry-out	5	4	5	3	5	3	3	5	8	7	7
	Disappearance	19	23	20	20	27	32	32	37	41	46	47
	Seed & Residual Use	1	1	1	1	1	1	1	2	3	2	3
	Crush*****	5	5	5	5	6	6	6	6	5	5	5
	Barge Ldngs UpMS	5	7	6	5	8	8	8	11	9	10	9
	Total Use	10	13	13	12	15	15	15	19	18	17	17
	Net Exports (- = imports)	8	10	7	9	12	17	17	18	23	29	29
	Carryout pct Total Use	47%	31%	40%	25%	35%	22%	17%	24%	45%	41%	38%

*Each county allocated stocks proportional to its share of state production

Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.

PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter;

Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
30	Iowa	IA			

IOWA ASD30 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD30model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	-10	80%	2.69	1.55	-27.0	-29.59				
91-92	1	81%	2.85	1.62	-28.0	-29.70				
92-93	-14	94%	2.49	1.72	-28.0	-31.24				
93-94	-24	68%	3.19	1.72	-27.0	-21.50				
94-95	-20	100%	3.00	1.89	-27.0	-25.92				
95-96	17	88%	5.55	1.89	-9.0	-9.11				
96-97	2	88%	3.21	1.00	-26.0	-30.14				
97-98	17	93%	2.95	1.00	-35.0	-35.01				
98-99	14	100%	2.40	1.00	-42.0	-39.79				
99-00	21	107%	2.58	1.00	-43.0	-39.99	-39.44	-39.01	-37.81	-35.64
00-01	5	105%	2.47	1.00						
						Impact:	0.54	0.98	2.17	4.35

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.95
R Square	0.90
Adjusted R Square	0.82
Standard Error	4.06
Observations	10.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	741.0164	185.2541	11.216155	0.0103451
Residual	5	82.583601	16.51672		
Total	9	823.6			

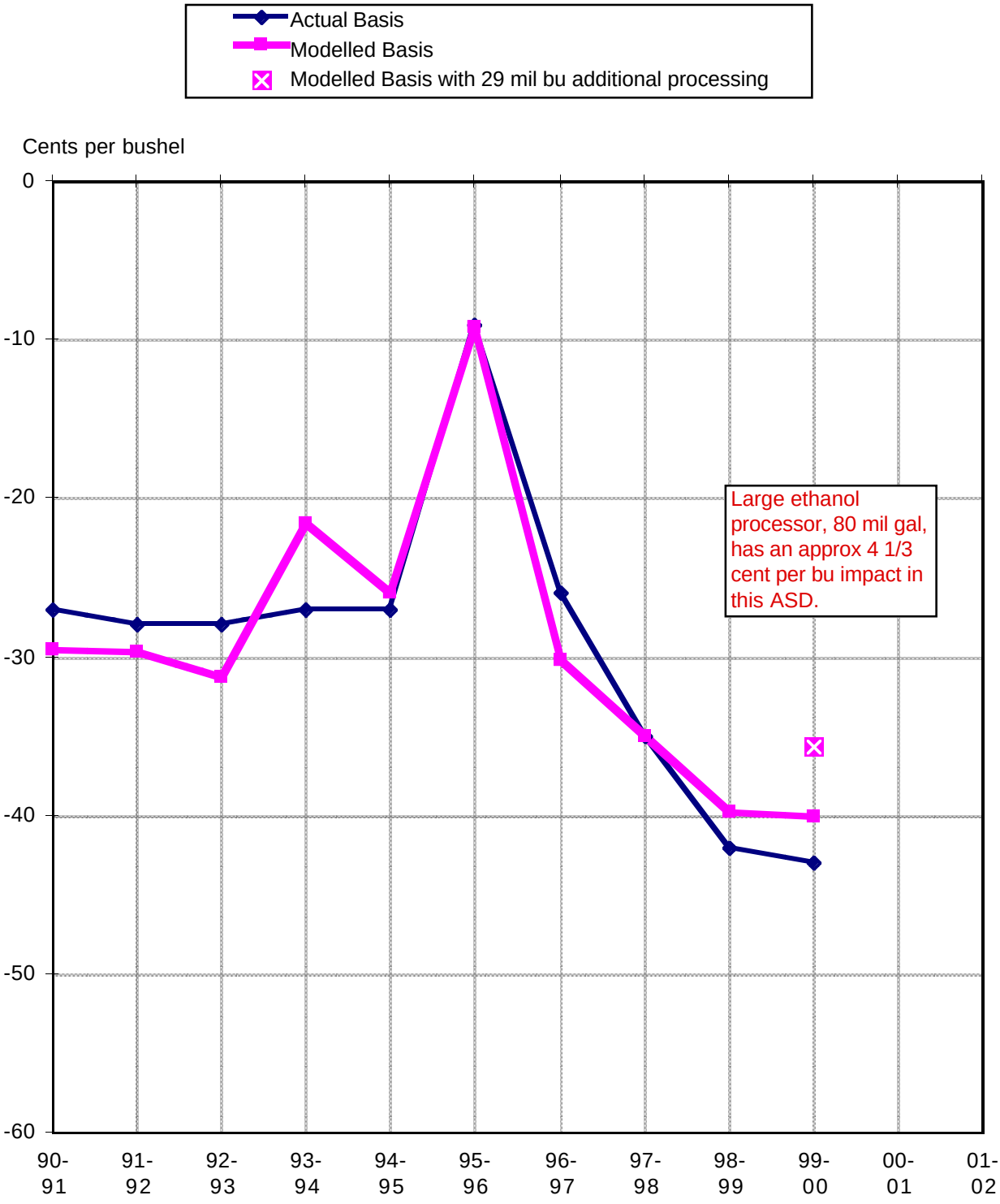
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-52.6684	16.2082	-3.2495	0.0227	-94.3330	-11.0039	-94.3330	-11.0039	*b*
Corn Exports	-0.1495	0.1764	-0.8475	0.4354	-0.6030	0.3040	-0.6030	0.3040	*ne*
Storage Ratio	-9.2626	15.5279	-0.5965	0.5768	-49.1784	30.6531	-49.1784	30.6531	*gs*
Corn Price	8.3257	2.6151	3.1837	0.0244	1.6035	15.0479	1.6035	15.0479	*jj*
Loan Rate	4.2535	7.0019	0.6075	0.5701	-13.7454	22.2523	-13.7454	22.2523	*ln*

RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-29.5946	2.5946
2	-29.7019	1.7019
3	-31.2354	3.2354
4	-21.5041	-5.4959
5	-25.9250	-1.0750
6	-9.1146	0.1146
7	-30.1397	4.1397
8	-35.0101	0.0101
9	-39.7891	-2.2109
10	-39.9854	-3.0146

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*

IOWA ASD 30 ACTUAL BASIS VS. MODELLED



IA_ASD40 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD40. PRXrev. 23-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD40	Carry-in*	46	54	36	94	27	64	12	30	39	64	61
CORN	Production**	220	215	286	142	278	209	250	226	243	255	237
	Supply	266	269	321	236	305	273	262	256	282	319	299
	Carry-out	50	36	87	30	63	12	32	39	60	65	77
	Disappearance	216	233	234	206	242	261	231	217	222	254	221
	Residual Use***	22	17	28	9	29	4	27	22	16	23	21
	Feed Use****	54	57	56	56	52	46	45	62	62	63	61
	Industrial Use*****	0	0	0	0	12	15	17	21	19	19	20
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	77	75	84	65	93	65	88	105	98	105	102
	Net Exports (- = imports)	139	158	150	141	150	196	142	112	124	149	120
	Carryout pct Total Use	66%	48%	104%	46%	68%	19%	36%	38%	62%	62%	76%
IA_ASD40	Carry-in*	8	12	11	15	7	12	7	5	8	13	10
SOYBEANS	Production**	50	53	58	45	72	64	66	73	73	70	62
	Supply	58	64	68	61	79	76	73	78	81	83	72
	Carry-out	12	10	14	8	13	7	5	8	13	11	9
	Disappearance	46	55	54	53	66	69	68	69	67	72	63
	Seed & Residual Use	2	3	3	2	4	3	3	4	5	3	4
	Crush*****	34	36	37	37	41	41	43	44	42	41	42
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	37	39	40	39	44	44	46	48	47	44	46
	Net Exports (- = imports)	10	16	14	14	22	25	22	21	21	28	18
	Carryout pct Total Use	33%	25%	35%	19%	29%	16%	12%	18%	28%	25%	20%

*Each county allocated stocks proportional to its share of state production

Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.

PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter;

Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
40	Iowa	IA			

IOWA ASD40 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD40model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	139	80%	2.69	1.55	-33.0	-34.76				
91-92	158	81%	2.85	1.62	-34.0	-32.72				
92-93	150	94%	2.49	1.72	-33.0	-36.99				
93-94	141	68%	3.19	1.72	-32.0	-27.80				
94-95	150	100%	3.00	1.89	-33.0	-33.52				
95-96	196	88%	5.55	1.89	-14.0	-13.45				
96-97	142	88%	3.21	1.00	-31.0	-37.40				
97-98	112	93%	2.95	1.00	-41.0	-41.03				
98-99	124	100%	2.40	1.00	-48.0	-45.48				
99-00	149	107%	2.58	1.00	-49.0	-44.85	-44.72	-44.63	-44.35	-43.86
00-01	120	105%	2.47	1.00						
						Impact:	0.12	0.22	0.49	0.98

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.94
R Square	0.88
Adjusted R Square	0.79
Standard Error	4.55
Observations	10.00

ANOVA

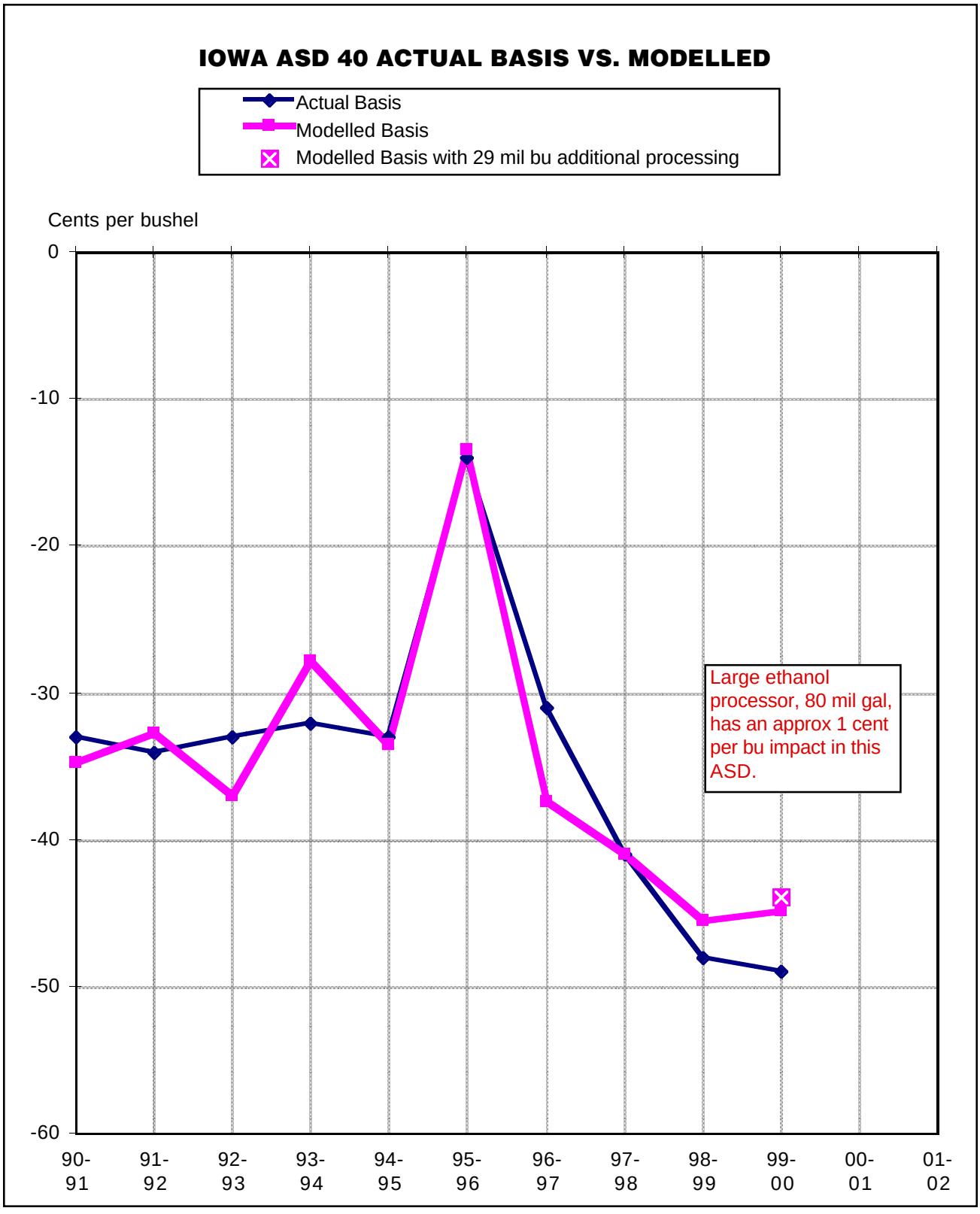
	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	776.24254	194.06064	9.3878389	0.0151753
Residual	5	103.35746	20.671492		
Total	9	879.6			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-53.6783	17.2361	-3.1143	0.0264	-97.9850	-9.3716	-97.9850	-9.3716	*b*
Corn Exports	0.0338	0.1356	0.2496	0.8128	-0.3147	0.3823	-0.3147	0.3823	*ne*
Storage Ratio	-19.3980	15.6084	-1.2428	0.2690	-59.5206	20.7246	-59.5206	20.7246	*gs*
Corn Price	6.3510	2.7227	2.3326	0.0670	-0.6478	13.3499	-0.6478	13.3499	*jj*
Loan Rate	8.1604	5.8714	1.3899	0.2233	-6.9324	23.2532	-6.9324	23.2532	*ln*

RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-34.7608	1.7608
2	-32.7245	-1.2755
3	-36.9873	3.9873
4	-27.8026	-4.1974
5	-33.5249	0.5249
6	-13.4456	-0.5544
7	-37.3968	6.3968
8	-41.0330	0.0330
9	-45.4779	-2.5221
10	-44.8467	-4.1533

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*



IA_ASD_50 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD_50. PRXrev. 23-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD_50	Carry-in*	47	52	36	90	28	73	12	33	42	66	68
CORN	Production**	222	209	290	136	287	240	254	252	261	266	263
	Supply	269	262	327	226	315	313	267	285	303	332	331
	Carry-out	51	35	89	29	65	14	32	44	65	68	86
	Disappearance	218	227	238	197	250	299	234	242	238	265	246
	Residual Use***	22	17	29	9	30	5	27	24	17	24	23
	Feed Use****	50	53	52	51	47	42	41	45	45	45	43
	Industrial Use*****	67	71	73	79	79	72	78	89	93	92	95
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	139	141	153	139	156	119	145	158	156	160	161
	Net Exports (- = imports)	79	86	85	58	94	180	89	83	82	104	84
	Carryout pct Total Use	36%	25%	58%	20%	42%	12%	22%	28%	42%	42%	53%
IA_ASD_50	Carry-in*	9	13	11	15	7	14	7	6	9	14	12
SOYBEANS	Production**	53	58	60	43	74	71	66	78	80	76	71
	Supply	62	71	71	58	81	84	74	84	89	90	82
	Carry-out	13	11	15	7	13	8	6	9	15	12	10
	Disappearance	49	60	57	51	68	76	68	75	74	78	72
	Seed & Residual Use	2	3	3	2	4	3	3	4	5	4	5
	Crush*****	41	44	45	45	49	49	52	53	45	41	42
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	44	47	48	47	53	52	55	57	51	45	46
	Net Exports (- = imports)	5	13	9	4	15	24	13	18	23	34	26
	Carryout pct Total Use	29%	23%	31%	15%	25%	15%	10%	16%	29%	27%	22%

*Each county allocated stocks proportional to its share of state production
Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.
PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter;
Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
50	Iowa	IA			

IOWA ASD50 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD50model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	79	80%	2.69	1.55	-31.0	-32.64				
91-92	86	81%	2.85	1.62	-32.0	-31.12				
92-93	85	94%	2.49	1.72	-32.0	-35.11				
93-94	58	68%	3.19	1.72	-31.0	-26.95				
94-95	94	100%	3.00	1.89	-31.0	-32.05				
95-96	180	88%	5.55	1.89	-13.0	-12.30				
96-97	89	88%	3.21	1.00	-30.0	-36.28				
97-98	83	93%	2.95	1.00	-39.0	-39.04				
98-99	82	100%	2.40	1.00	-46.0	-43.44				
99-00	104	107%	2.58	1.00	-47.0	-43.07	-42.88	-42.73	-42.33	-41.58
00-01	84	105%	2.47	1.00						
						Impact:	0.19	0.33	0.74	1.48

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.94
R Square	0.89
Adjusted R Square	0.80
Standard Error	4.30
Observations	10.00

ANOVA

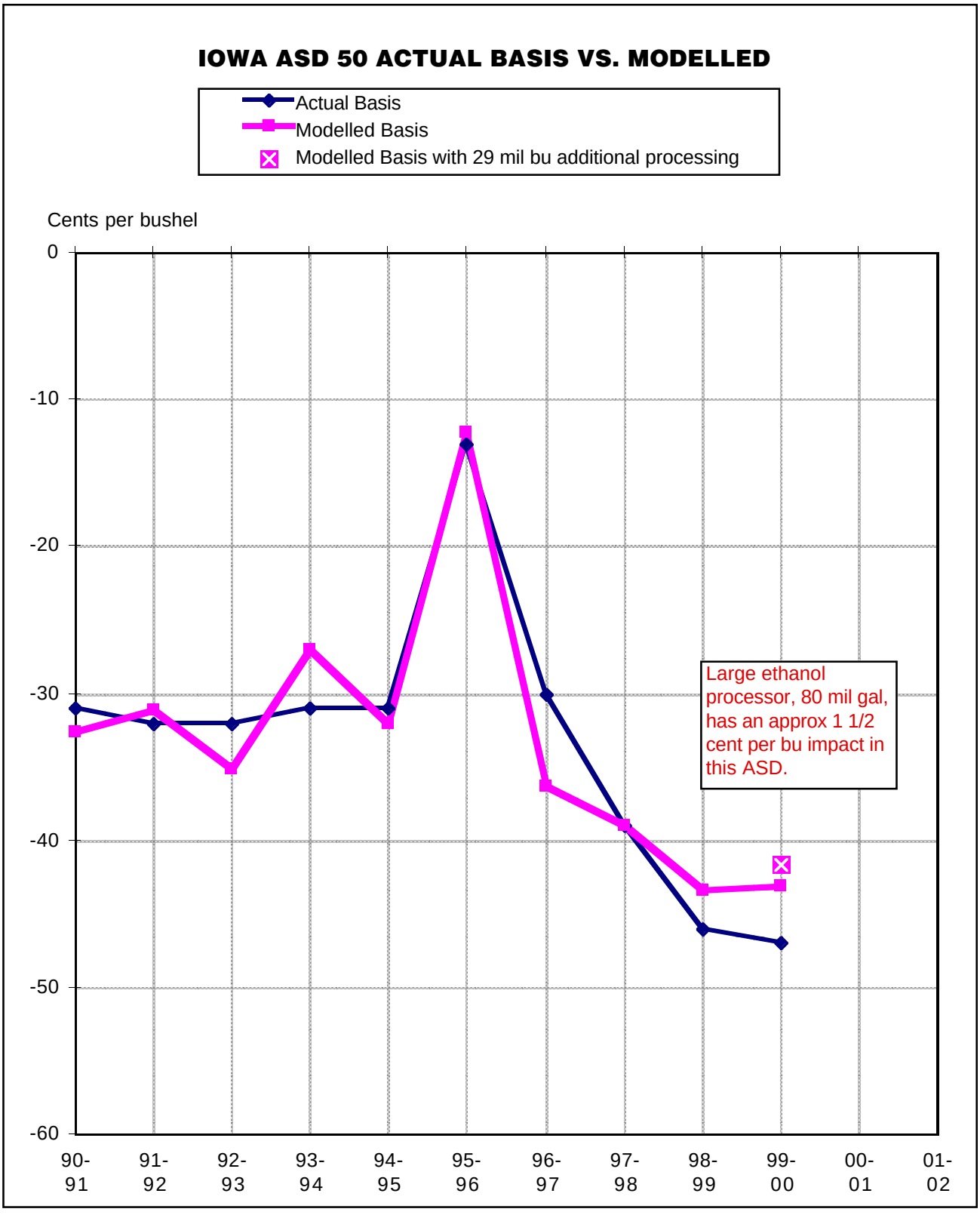
	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	730.97001	182.7425	9.8641114	0.0136548
Residual	5	92.629988	18.525998		
Total	9	823.6			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-44.7803	27.5724	-1.6241	0.1653	-115.6572	26.0966	-115.6572	26.0966	*b*
Corn Exports	0.0510	0.1629	0.3131	0.7668	-0.3678	0.4698	-0.3678	0.4698	*ne*
Storage Ratio	-23.4324	25.9095	-0.9044	0.4072	-90.0347	43.1700	-90.0347	43.1700	*gs*
Corn Price	4.9217	5.6688	0.8682	0.4250	-9.6504	19.4938	-9.6504	19.4938	*jj*
Loan Rate	8.7821	4.4336	1.9808	0.1045	-2.6148	20.1791	-2.6148	20.1791	*ln*

RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-32.6442	1.6442
2	-31.1192	-0.8808
3	-35.1100	3.1100
4	-26.9499	-4.0501
5	-32.0538	1.0538
6	-12.3042	-0.6958
7	-36.2795	6.2795
8	-39.0369	0.0369
9	-43.4351	-2.5649
10	-43.0671	-3.9329

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*



IA_ASD60 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD60. PRXrev. 12-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD60	Carry-in*	38	37	25	74	21	48	9	24	32	48	47
CORN	Production**	180	146	199	111	216	158	186	180	196	191	183
	Supply	218	182	224	185	237	205	195	204	228	238	230
	Carry-out	41	24	61	23	49	9	24	31	49	49	60
	Disappearance	177	158	163	162	188	196	172	172	179	190	171
	Residual Use***	18	12	20	7	22	3	20	17	13	17	16
	Feed Use****	54	57	56	56	51	46	45	37	37	36	35
	Industrial Use*****	143	156	160	173	176	169	174	191	208	210	220
	Barge Ldngs UpMS	77	77	55	56	74	100	62	65	83	80	72
	Total Use	293	302	291	292	324	318	300	310	341	343	343
	Net Exports (- = imports)	-116	-144	-128	-130	-136	-122	-128	-138	-162	-153	-172
	Carryout pct Total Use	14%	8%	21%	8%	15%	3%	8%	10%	14%	14%	17%
IA_ASD60	Carry-in*	5	6	5	8	4	6	4	3	5	9	7
SOYBEANS	Production**	28	28	28	24	37	32	37	45	49	48	44
	Supply	33	35	33	32	40	39	41	48	54	57	51
	Carry-out	7	5	7	4	6	4	3	5	9	8	6
	Disappearance	26	29	27	28	34	35	38	43	45	50	45
	Seed & Residual Use	1	1	1	1	2	1	2	2	3	2	3
	Crush*****	15	16	16	16	18	18	19	19	16	15	15
	Barge Ldngs UpMS	5	7	6	7	11	7	12	12	10	11	10
	Total Use	21	24	24	25	30	26	33	33	30	28	28
	Net Exports (- = imports)	5	5	3	3	4	9	5	10	16	22	17
	Carryout pct Total Use	33%	22%	29%	16%	22%	14%	9%	16%	30%	27%	23%

*Each county allocated stocks proportional to its share of state production

Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.

PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter; Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
60	Iowa	IA			

IOWA ASD60 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD60model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	-116	80%	2.69	1.55	-22.0	-20.30				
91-92	-144	81%	2.85	1.62	-23.0	-25.89				
92-93	-128	94%	2.49	1.72	-22.0	-23.71				
93-94	-130	68%	3.19	1.72	-22.0	-19.37				
94-95	-136	100%	3.00	1.89	-22.0	-21.90				
95-96	-122	88%	5.55	1.89	-4.0	-3.88				
96-97	-128	88%	3.21	1.00	-21.0	-24.53				
97-98	-138	93%	2.95	1.00	-30.0	-28.63				
98-99	-162	100%	2.40	1.00	-37.0	-37.87				
99-00	-153	107%	2.58	1.00	-38.0	-34.91	-34.01	-33.29	-31.31	-27.71
00-01	-172	105%	2.47	1.00						
						Impact:	0.90	1.62	3.60	7.20

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.97
R Square	0.94
Adjusted R Square	0.90
Standard Error	3.03
Observations	10.00

ANOVA

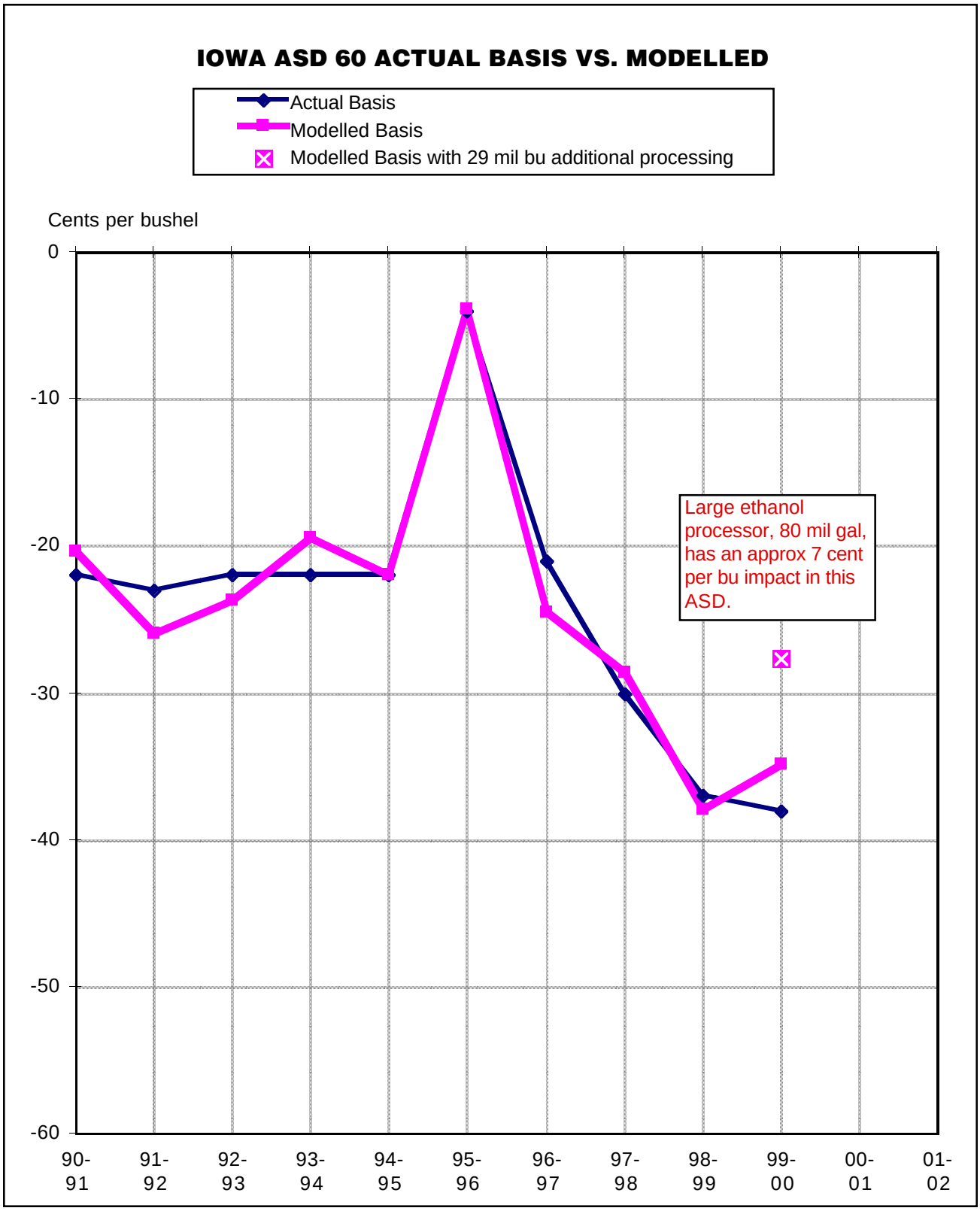
	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	781.1003	195.27507	21.318379	0.002427
Residual	5	45.799701	9.1599401		
Total	9	826.9			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-14.3584	16.3259	-0.8795	0.4194	-56.3254	27.6086	-56.3254	27.6086	*b*
Corn Exports	0.2474	0.1001	2.4708	0.0565	-0.0100	0.5047	-0.0100	0.5047	*ne*
Storage Ratio	-3.7117	10.8121	-0.3433	0.7453	-31.5050	24.0816	-31.5050	24.0816	*gs*
Corn Price	5.5343	1.2893	4.2925	0.0078	2.2200	8.8485	2.2200	8.8485	*jj*
Loan Rate	6.9877	3.2162	2.1726	0.0819	-1.2798	15.2552	-1.2798	15.2552	*ln*

RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-20.3032	-1.6968
2	-25.8917	2.8917
3	-23.7101	1.7101
4	-19.3658	-2.6342
5	-21.9013	-0.0987
6	-3.8805	-0.1195
7	-24.5338	3.5338
8	-28.6319	-1.3681
9	-37.8722	0.8722
10	-34.9096	-3.0904

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*



IA_ASD70 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD70. PRXrev. 23-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	99-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD70	Carry-in*	25	32	19	44	14	25	6	16	21	31	34
CORN	Production**	118	129	154	67	145	84	127	120	133	125	134
	Supply	143	161	173	111	159	109	133	136	154	156	168
	Carry-out	27	22	47	14	33	5	16	21	33	32	43
	Disappearance	116	139	126	97	126	104	117	115	121	124	125
	Residual Use***	12	10	15	4	15	2	13	12	9	11	12
	Feed Use****	27	29	28	28	26	23	23	32	32	33	32
	Industrial Use*****	0	0	0	0	7	9	10	12	12	11	12
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	39	39	43	32	48	34	46	56	53	55	55
	Net Exports (- = imports)	77	101	83	65	78	70	71	59	69	69	69
	Carryout pct Total Use	69%	56%	109%	44%	68%	14%	35%	37%	63%	57%	78%
IA_ASD70	Carry-in*	5	7	6	8	4	6	4	3	4	7	6
SOYBEANS	Production**	28	32	33	24	39	29	35	40	39	39	39
	Supply	33	40	39	32	43	35	39	43	43	47	46
	Carry-out	7	6	8	4	7	3	3	5	7	6	6
	Disappearance	26	34	31	28	36	32	36	38	36	41	40
	Seed & Residual Use	1	2	2	1	2	1	2	2	3	2	3
	Crush*****	4	4	4	4	4	4	5	5	16	23	24
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	5	5	6	5	6	6	6	7	18	25	26
	Net Exports (- = imports)	22	28	25	23	30	26	30	32	18	15	14
	Carryout pct Total Use	140%	111%	142%	76%	111%	58%	47%	69%	38%	25%	21%

*Each county allocated stocks proportional to its share of state production

Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.

PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter;

Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
70	Iowa	IA			

IOWA ASD70 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD70model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	77	80%	2.69	1.55	-33.0	-34.72				
91-92	101	81%	2.85	1.62	-33.0	-30.04				
92-93	83	94%	2.49	1.72	-33.0	-36.93				
93-94	65	68%	3.19	1.72	-32.0	-29.14				
94-95	78	100%	3.00	1.89	-33.0	-33.76				
95-96	70	88%	5.55	1.89	-14.0	-13.37				
96-97	71	88%	3.21	1.00	-31.0	-36.83				
97-98	59	93%	2.95	1.00	-41.0	-41.33				
98-99	69	100%	2.40	1.00	-48.0	-45.46				
99-00	69	107%	2.58	1.00	-49.0	-45.43	-44.94	-44.56	-43.49	-41.55
00-01	69	105%	2.47	1.00						
						Impact:	0.48	0.87	1.94	3.88

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.95
R Square	0.90
Adjusted R Square	0.82
Standard Error	4.23
Observations	10.00

ANOVA

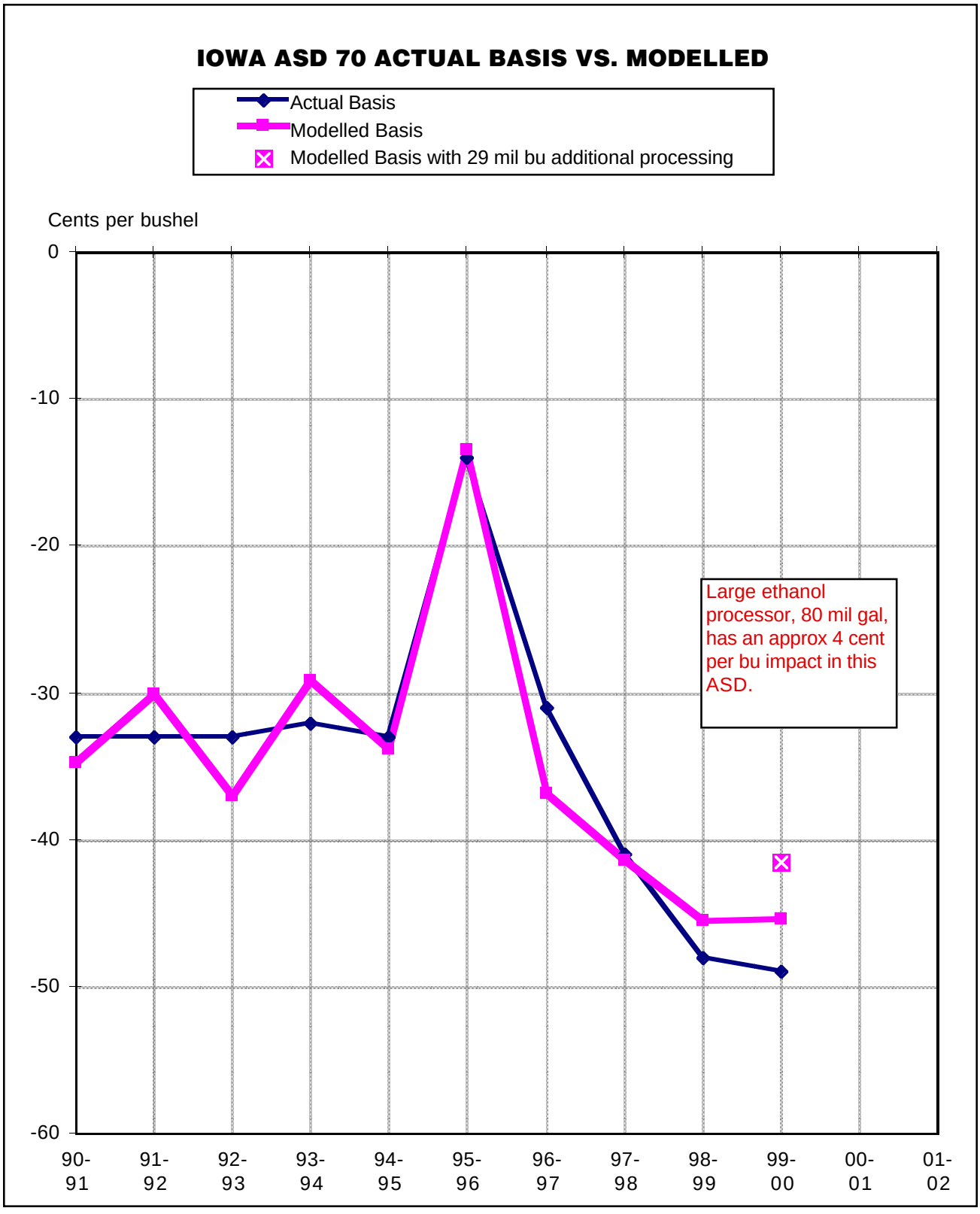
	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	792.49747	198.12437	11.055735	0.0106749
Residual	5	89.60253	17.920506		
Total	9	882.1			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-60.4903	18.3709	-3.2927	0.0216	-107.7142	-13.2663	-107.7142	-13.2663	*b*
Corn Exports	0.1333	0.1494	0.8921	0.4132	-0.2507	0.5173	-0.2507	0.5173	*ne*
Storage Ratio	-18.9376	13.4755	-1.4053	0.2189	-53.5775	15.7023	-53.5775	15.7023	*gs*
Corn Price	7.5200	1.9157	3.9254	0.0111	2.5954	12.4445	2.5954	12.4445	*jj*
Loan Rate	6.7283	5.0872	1.3226	0.2432	-6.3486	19.8052	-6.3486	19.8052	*ln*

RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-34.7207	1.7207
2	-30.0373	-2.9627
3	-36.9325	3.9325
4	-29.1437	-2.8563
5	-33.7561	0.7561
6	-13.3739	-0.6261
7	-36.8255	5.8255
8	-41.3269	0.3269
9	-45.4557	-2.5443
10	-45.4278	-3.5722

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*



IA_ASD80 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD80. PRXrev. 23-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD80	Carry-in*	12	14	9	15	7	8	3	8	9	14	16
CORN	Production**	56	57	72	23	75	25	54	59	58	57	64
	Supply	68	72	81	38	83	32	56	67	67	71	80
	Carry-out	13	10	22	5	17	1	7	10	14	14	21
	Disappearance	55	62	59	33	66	31	50	56	53	56	60
	Residual Use***	6	5	7	1	8	0	6	6	4	5	6
	Feed Use****	22	23	22	22	21	19	19	15	15	15	15
	Industrial Use*****	18	19	19	21	21	18	20	23	26	22	22
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	45	46	48	45	50	37	45	44	45	42	43
	Net Exports (- = imports)	10	16	11	-11	16	-6	4	12	8	14	17
	Carryout pct Total Use	28%	21%	46%	11%	34%	4%	15%	23%	32%	34%	48%
IA_ASD80	Carry-in*	2	3	3	4	2	3	2	2	2	4	4
SOYBEANS	Production**	13	15	15	11	19	15	16	22	21	20	21
	Supply	16	19	18	14	21	18	17	23	23	24	25
	Carry-out	3	3	4	2	3	2	1	3	4	3	3
	Disappearance	12	16	14	13	18	17	16	21	20	21	22
	Seed & Residual Use	1	1	1	1	1	1	1	1	1	1	1
	Crush*****	17	18	18	18	20	14	14	15	17	19	19
	Barge Ldngs UpMS	0	0	0	0	0	0	0	0	0	0	0
	Total Use	17	19	19	19	21	14	15	17	19	20	20
	Net Exports (- = imports)	-5	-3	-5	-6	-3	2	1	4	1	1	1
	Carryout pct Total Use	18%	15%	19%	10%	16%	12%	9%	15%	21%	16%	15%

*Each county allocated stocks proportional to its share of state production
Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.
PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter; Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
80	Iowa	IA			

IOWA ASD80 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD80model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	10	80%	2.69	1.55	-33.0	-34.31				
91-92	16	81%	2.85	1.62	-34.0	-31.40				
92-93	11	94%	2.49	1.72	-34.0	-38.21				
93-94	-11	68%	3.19	1.72	-33.0	-30.29				
94-95	16	100%	3.00	1.89	-33.0	-33.20				
95-96	-6	88%	5.55	1.89	-14.0	-13.59				
96-97	4	88%	3.21	1.00	-31.0	-37.52				
97-98	12	93%	2.95	1.00	-41.0	-39.26				
98-99	8	100%	2.40	1.00	-48.0	-46.59				
99-00	14	107%	2.58	1.00	-49.0	-45.63	-44.83	-44.20	-42.44	-39.24
00-01	17	105%	2.47	1.00						
						Impact:	0.80	1.44	3.19	6.39

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.95
R Square	0.89
Adjusted R Square	0.81
Standard Error	4.30
Observations	10.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	779.34529	194.83632	10.514108	0.0119033
Residual	5	92.654712	18.530942		
Total	9	872			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-49.1567	17.0651	-2.8805	0.0346	-93.0238	-5.2896	-93.0238	-5.2896	*b*
Corn Exports	0.2196	0.2569	0.8549	0.4316	-0.4407	0.8800	-0.4407	0.8800	*ne*
Storage Ratio	-26.6320	17.9309	-1.4853	0.1976	-72.7248	19.4607	-72.7248	19.4607	*gs*
Corn Price	8.3299	2.3184	3.5929	0.0157	2.3702	14.2897	2.3702	14.2897	*jj*
Loan Rate	7.4537	4.5536	1.6369	0.1626	-4.2518	19.1592	-4.2518	19.1592	*ln*

RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-34.3054	1.3054
2	-31.3994	-2.6006
3	-38.2131	4.2131
4	-30.2894	-2.7106
5	-33.1975	0.1975
6	-13.5920	-0.4080
7	-37.5216	6.5216
8	-39.2621	-1.7379
9	-46.5862	-1.4138
10	-45.6334	-3.3666

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*

IA_ASD90 ORIGINATION AREA: CORN & SOYBEAN SUPPLY-DEMAND

PRXfile:IA_ASD90. PRXrev. 23-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop	Item	Crop year										
		90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
		mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
IA_ASD90	Carry-in*	23	23	16	41	13	22	6	15	18	25	31
CORN	Production**	111	92	131	62	140	72	115	117	109	101	119
	Supply	134	115	147	103	153	94	120	132	126	127	149
	Carry-out	25	15	40	13	32	4	15	20	27	26	39
	Disappearance	109	100	107	90	122	90	106	112	99	101	111
	Residual Use***	11	7	13	4	14	1	12	11	7	9	10
	Feed Use****	42	45	44	44	40	36	35	29	28	28	27
	Industrial Use*****	81	90	90	94	95	88	94	98	110	98	99
	Barge Ldngs UpMS	54	54	39	49	43	45	41	42	54	52	47
	Total Use	189	197	186	191	193	170	182	180	199	187	183
	Net Exports (- = imports)	-80	-97	-78	-101	-72	-80	-76	-68	-100	-86	-73
	Carryout pct Total Use	13%	8%	22%	7%	16%	2%	8%	11%	14%	14%	21%
IA_ASD90	Carry-in*	4	6	5	8	3	6	3	3	4	6	5
SOYBEANS	Production**	23	26	27	22	34	31	29	37	37	32	32
	Supply	27	32	32	30	37	36	32	40	41	38	37
	Carry-out	6	5	7	4	6	3	2	4	7	5	5
	Disappearance	22	28	25	26	31	33	30	36	34	33	33
	Seed & Residual Use	1	1	1	1	2	1	1	2	2	2	2
	Crush*****	2	3	3	3	3	3	3	3	3	2	3
	Barge Ldngs UpMS	7	11	10	16	16	19	18	22	19	20	19
	Total Use	11	15	14	20	20	23	23	27	24	24	23
	Net Exports (- = imports)	11	12	11	6	11	10	7	8	10	9	9
	Carryout pct Total Use	52%	33%	46%	18%	29%	15%	11%	16%	28%	21%	20%

*Each county allocated stocks proportional to its share of state production
Stocks adjusted each year, according to share of production, so CI is not exactly equal to CO.

**Latest year is PRX estimate until March of the crop year, when USDA releases county production data.

***Calculated by PRX for state, allocated by production.

****Based on reported animal numbers per county times a feed use formula for the state.
PRX uses USDA state numbers plus the following sources by animal type: Cattle, Beef Spotter; Poultry, Who's Who; Pork, latest USDA Census.

*****From PRX private survey of corn processors and soybean crushers.

Exports if negative = imports into area.

Area Definition by ASDs

ASD	CoName	St	ASD	CoName	St
90	Iowa	IA			

IOWA ASD90 BASIS MODEL FACTORS AND RESULTS

PRXfile:IA_ASD90model. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

Crop year	ASD Net Exports to	State Grain Supply Storage Ratio	Jan-Jul High in Jul Futures	USDA Loan Rate	ASD Basis* Nearby Futures actual	ASD Basis as modelled	ASD Basis with Additional Processing Million Gallons 10	18	40	80
							Million bushels (@2.75 gal/bu) 3.6	6.5	14.5	29.1
	NE	*GS*	*JJ*	*LN*						
	mil bu	pct	$/bu	$/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu	cts/bu
90-91	-80	80%	2.69	1.55	-25.0	-24.91				
91-92	-97	81%	2.85	1.62	-26.0	-27.04				
92-93	-78	94%	2.49	1.72	-25.0	-28.03				
93-94	-101	68%	3.19	1.72	-24.0	-21.37				
94-95	-72	100%	3.00	1.89	-25.0	-23.76				
95-96	-80	88%	5.55	1.89	-6.0	-6.25				
96-97	-76	88%	3.21	1.00	-23.0	-27.76				
97-98	-68	93%	2.95	1.00	-33.0	-29.10				
98-99	-100	100%	2.40	1.00	-40.0	-40.94				
99-00	-86	107%	2.58	1.00	-41.0	-38.84	-38.10	-37.50	-35.87	-32.90
00-01	-73	105%	2.47	1.00						
						Impact:	0.74	1.34	2.97	5.94

*Calculated from USDA PCPs, 1990-99 average

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.96
R Square	0.93
Adjusted R Square	0.87
Standard Error	3.53
Observations	10.00

ANOVA

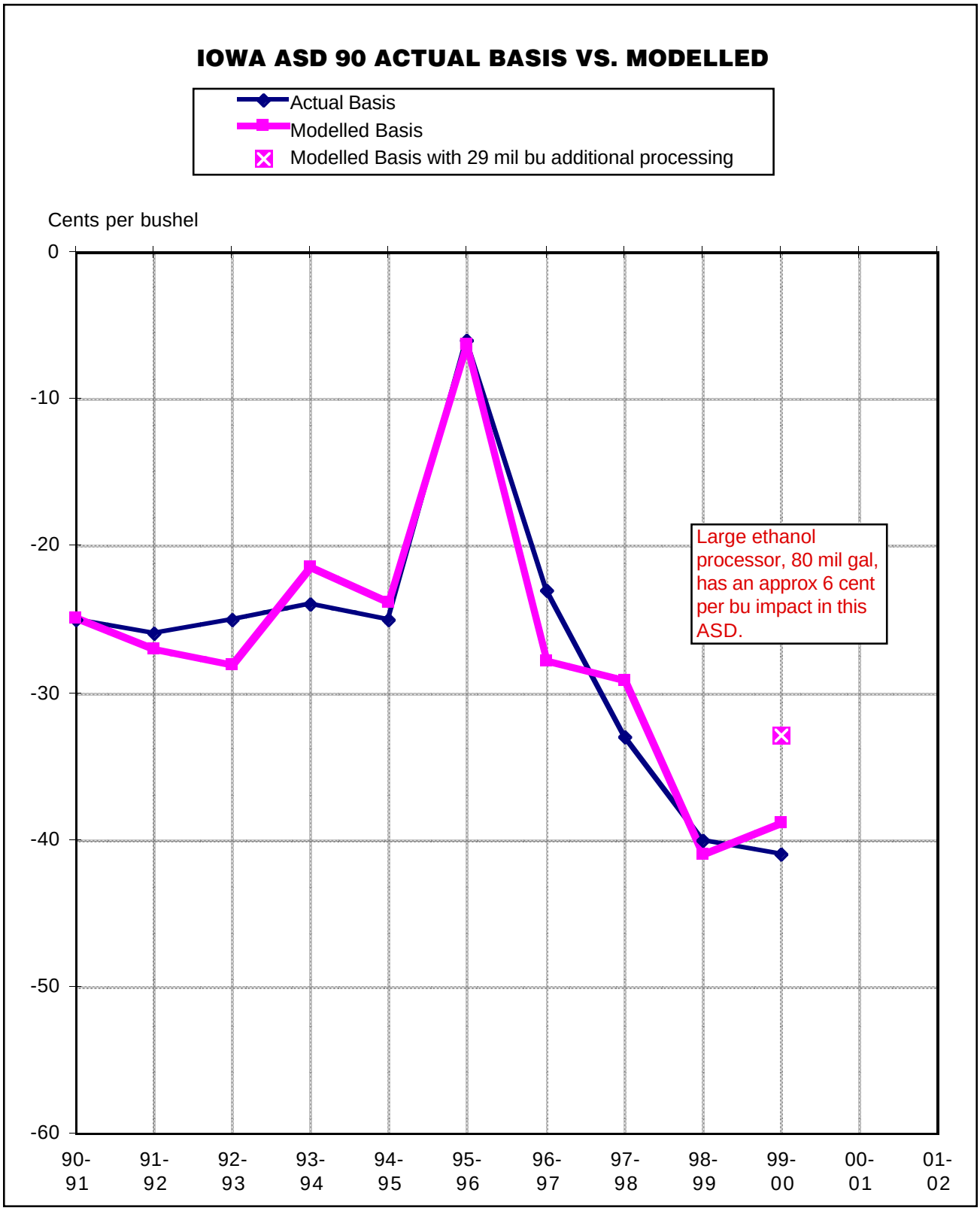
	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	817.34377	204.33594	16.410882	0.0044288
Residual	5	62.256233	12.451247		
Total	9	879.6			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	-17.3521	19.9041	-0.8718	0.4232	-68.5171	33.8130	-68.5171	33.8130	*b*
Corn Exports	0.2041	0.1106	1.8451	0.1243	-0.0802	0.4883	-0.0802	0.4883	*ne*
Storage Ratio	-26.8451	12.2232	-2.1962	0.0795	-58.2658	4.5756	-58.2658	4.5756	*gs*
Corn Price	6.2434	1.4741	4.2355	0.0082	2.4542	10.0327	2.4542	10.0327	*jj*
Loan Rate	8.6778	3.5653	2.4340	0.0591	-0.4871	17.8426	-0.4871	17.8426	*ln*

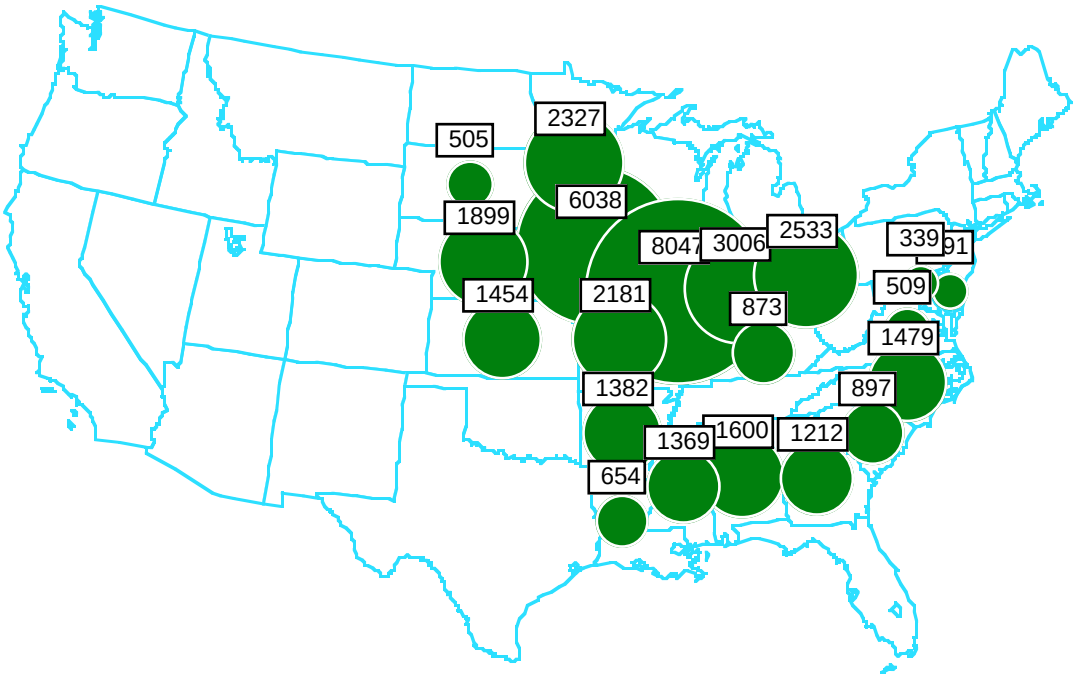
RESIDUAL OUTPUT

Observation	*Predicted Corn Basis*	*Residuals*
1	-24.9073	-0.0927
2	-27.0383	1.0383
3	-28.0310	3.0310
4	-21.3741	-2.6259
5	-23.7580	-1.2420
6	-6.2482	0.2482
7	-27.7649	4.7649
8	-29.0980	-3.9020
9	-40.9408	0.9408
10	-38.8394	-2.1606

Modelled basis = b + ne(NE + additional processed) + gs*GS + jj*JJ + ln*LN*

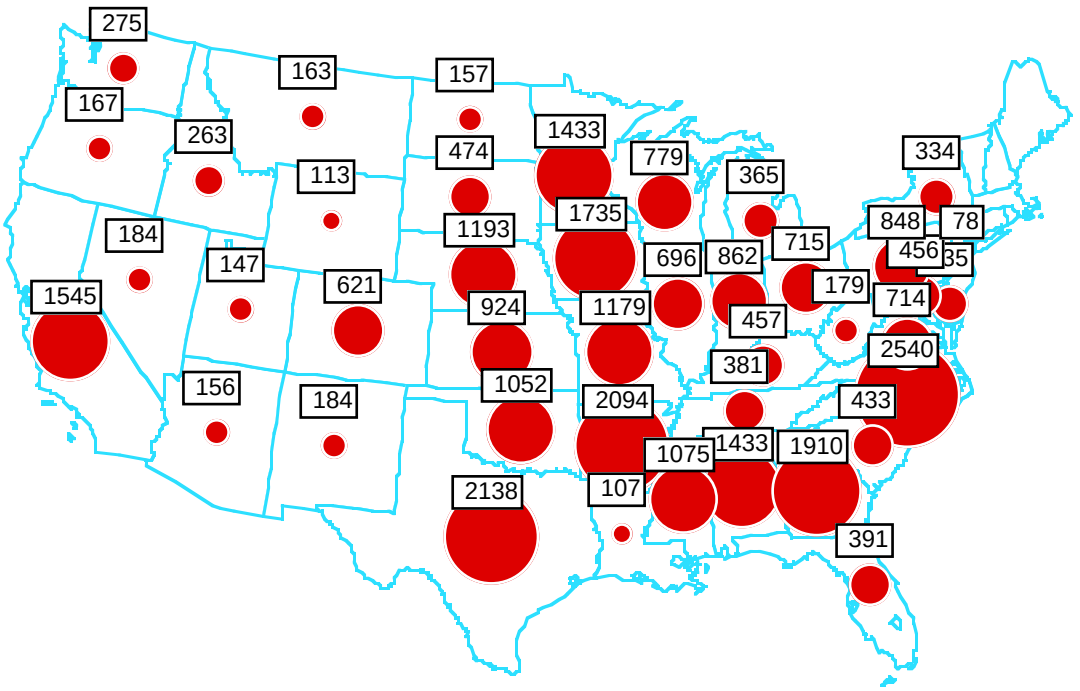


Production of Soybean Meal*, Crop Year 01-02, 000st



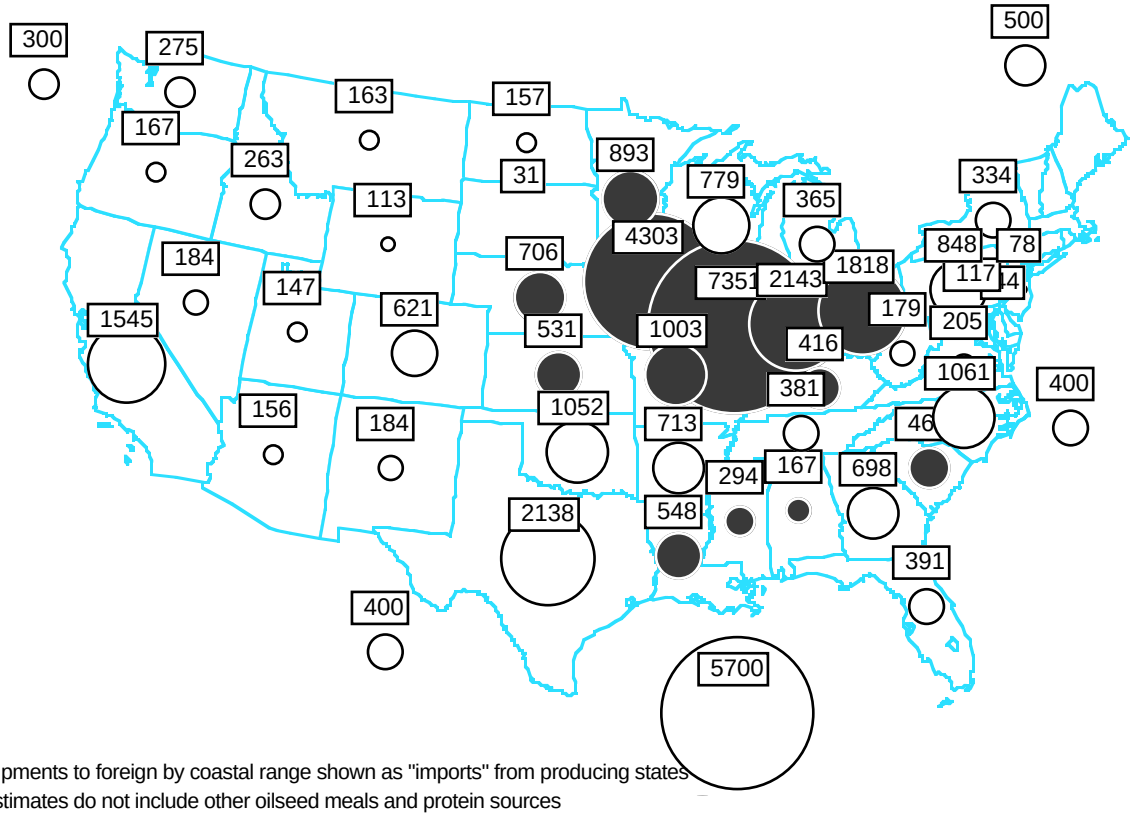
*Estimates do not include other oilseed meals and protein sources

Feed Use by All Animal Types of Soybean Meal*, Crop Year 01-02, 000st



*Estimates do not include other oilseed meals and protein sources

Net Imports (Clear) and Net Exports (Solid) of Soybean Meal*, Crop Year 01-02, 000st



Shipments to foreign by coastal range shown as "imports" from producing states
*Estimates do not include other oilseed meals and protein sources

The above pattern of soybean meal net imports and exports is meant to be suggestive of surpluses and deficits of animal protein; it does not incorporate other oilseed meals, alfalfa, range, and other animal feeds. Nonetheless, one can see the large quantities needed in the western states, including California, and thus the "ready" market there for locally produced distillers grains.

Iowa is a net exporter of protein meal, second in magnitude only to Illinois, and thus the market for distillers grains will not be strong in aggregate in Iowa, except when competitively priced vs. soymeal, and except when local (sub-county) geography favors its use in nearby livestock operations.

SOYBEAN SUPPLY-DEMAND AND MEAL DOMESTIC USE, IA & KS

PRXfile:BeanState_PrezGTB. PRXrev. 12-Jun-01. USDA: Jun-01. For GTB-01-06.

Item	Unit	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01
IOWA												
Planted area	000ac	8000	8700	8200	8600	8800	9300	9500	10500	10400	10800	10700
Havested area	000ac	7900	8630	8170	8300	8770	9260	9450	10400	10350	10750	10680
Yield	bu/ac	41.5	40.5	44.0	31.0	50.5	44.0	44.0	46.0	48.0	44.5	43.0
Production	milbu	328	350	359	257	443	407	416	478	497	478	459
Carry In	milbu	55	79	65	88	43	78	45	35	56	91	76
Supply	milbu	383	429	425	345	486	486	461	513	553	569	535
Carry Out	milbu	79	65	88	43	78	45	35	56	91	76	66
Disappearance	milbu	304	364	337	302	408	440	426	457	462	494	469
Seed & residual use	milbu	14	17	20	13	25	18	19	25	33	24	29
Crush Use	milbu	190	201	205	204	225	226	237	256	253	247	253
Total Use in State	milbu	204	218	225	217	250	244	257	282	287	271	283
Net Imp(+), Net Exp(	milbu	-100	-146	-112	-85	-158	-196	-170	-176	-175	-223	-186
Meal yield	lbs/bu	47.82	47.77	47.67	47.36	47.36	47.48	47.36	47.81	47.54	47.65	47.72
Meal production	000st	4540	4804	4885	4842	5329	5373	5617	6123	6022	5886	6047
Dairy	000 hpcau	370	382	389	385	341	343	357	352	339	329	330
Beef	000 hpcau	1511	1343	1348	1343	1307	1161	1339	1312	1312	1371	1326
Pork	000 hpcau	6432	6942	6688	6430	6099	5204	4416	4852	4694	4516	4296
Poultry	000 hpcau	718	843	897	914	946	966	1115	1141	1247	1249	1304
Other	000 hpcau	61	45	42	34	34	34	34	34	34	34	34
Total	000 hpcau	9092	9556	9363	9107	8728	7708	7262	7691	7625	7500	7291
Meal/hpcau	st	0.193	0.189	0.193	0.200	0.209	0.211	0.212	0.223	0.236	0.233	0.241
Meal fed	000st	1756	1811	1810	1825	1828	1624	1542	1718	1797	1746	1756
Net Imp(+), Net Exp(-)		-2785	-2994	-3076	-3017	-3501	-3748	-4075	-4405	-4225	-4140	-4291

ESTIMATED SOYMEAL FED IN IOWA BY ASD, 00-01

PRXfile:BeanState_PrezGTB. PRXrev. 12-Jun-01. USDA: Jun-01. For GTB-01-06.

Item	Unit	ASD 10	ASD 20	ASD 30	ASD 40	ASD 50	ASD 60	ASD 70	ASD 80	ASD 90	IA
		18%	9%	17%	14%	11%	11%	7%	5%	8%	
		shr IA	shr IA	shr IA	shr IA	shr IA	shr IA	shr IA	shr IA	shr IA	
HPCAU											
Dairy	000 hpcau	60	31	57	45	36	35	23	16	27	330
Beef	000 hpcau	241	125	230	180	144	140	94	63	109	1326
Pork	000 hpcau	781	406	746	581	466	454	305	204	353	4296
Poultry	000 hpcau	237	123	226	176	141	138	92	62	107	1304
Other	000 hpcau	6	3	6	5	4	4	2	2	3	34
Total	000 hpcau	1326	689	1266	987	790	770	517	346	600	7291
Meal Fed											
Dairy	st	14474	7520	13813	10770	8626	8404	5642	3778	6547	
Beef	st	58119	30193	55463	43244	34636	33743	22654	15172	26289	
Pork	st	188252	97799	179650	140070	112188	109296	73379	49143	85153	
Poultry	st	57126	29678	54516	42505	34044	33167	22267	14913	25840	
Other	st	1508	783	1439	1122	899	876	588	394	682	
TOTAL		319480	165973	304881	237710	190393	185484	124531	83399	144512	1756364

The above shows a soybean and soymeal supply-demand table for Iowa, along with estimated soymeal fed by ASD in 99-00, as a rough guide to the demand for protein meals such as distillers grains. The price of the by-product distillers grains is important to the potential return to a new ethanol plant, and a very simplified returns model is shown on page 41. The sensitivity of the potential return to relative corn price, DDG price, and ethanol price is shown on page 42, and the comparison of Iowa to other states is shown on page 43.

IOWA ETHANOL DRY MILL, ESTIMATED COSTS & RETURN, CURRENT PRICES

PRXfile:PRX_EthanolAnal_IA. PRXrev. 29-May-01. USDA: Jun-01. For GTB-01-05.

Item						Unit	Amount	Unit	Amount	Unit
Plant Size and Material Balance										
Ethanol Production Capacity							40	mil gal		
Ethanol conversion efficiency							2.74	gals/bu		
Corn grind							14.6	mil bu		
DDG yield							14	lbs/bu		
DDG production							102190	s tons		
Plant Sales		IOWA								
	US	Prem	Plant							
Ethanol	1.30	-0.06	1.24			$/gal	49,600,000	dollars		
DDG	93	-10	83			$/ston	8,430,657	dollars		
Carbon dioxide								dollars		
Other								dollars		
Total Sales							58,030,657	dollars		
Plant operating Costs*										
	US	Prem	Plant							
Corn purchase	1.85	-0.07	1.78			$/bu	25,985,401	dollars	1.78	$/bu
				Distillers grains						
	US	Prem	Plant	Dry	Wet					
Electricity	4.09	0.00	4.09	4.09	3.29	cts/gal	1,636,000	dollars	0.11	$/bu
Fuels	9.01	0.00	9.01	9.01	8.35	cts/gal	3,604,000	dollars	0.25	$/bu
		0%								
Waste management	0.56	0.00	0.56			cts/gal	224,000	dollars	0.02	$/bu
Water	0.25	0.00	0.25			cts/gal	100,000	dollars	0.01	$/bu
Enzymes	5.59	0.00	5.59			cts/gal	2,236,000	dollars	0.15	$/bu
Yeast	0.68	0.00	0.68			cts/gal	272,000	dollars	0.02	$/bu
Chemicals	2.70	0.00	2.70			cts/gal	1,080,000	dollars	0.07	$/bu
Denaturant	2.30	0.00	2.30			cts/gal	920,000	dollars	0.06	$/bu
Maintenance	3.59	0.00	3.59			cts/gal	1,436,000	dollars	0.10	$/bu
Labor	7.32	0.00	7.32			cts/gal	2,928,000	dollars	0.20	$/bu
Administrative	3.66	0.00	3.66			cts/gal	1,464,000	dollars	0.10	$/bu
Other	1.96	0.00	1.96			cts/gal	784,000	dollars	0.05	$/bu
Operating Costs	41.71	0.00	41.71				16,684,000	dollars	1.14	$/bu
Total Costs							42,669,401			
Plant Returns										
Before interest, taxes. incentives							15,361,255	dollars		
Capital investment	1.20	0.00	1.20			$/gal of capacity	48,000,000	dollars		
Interest expense	7%		8.40			cts/gal	3,360,000	dollars	0.23	$/bu
State producer's incentive						cts/gal		dollars	0.00	$/bu
Return after interest & incentive, before taxes							12,001,255	dollars	0.82	$/bu
State income tax	12%					pct/yr	1,440,151	dollars		
Federal income tax	35%					pct/yr	3,696,387	dollars		
Small producer tax credit	10.00					cts/gal	1,500,000	dollars		
Return after interest, taxes, incentives							8,364,718	dollars	0.57	$/bu

*Costs taken from Hosien Shapouri, USDA, 5-3-01, Bloomington, IL.
Note. The Shapouri survey estimates drying costs of Distillers Grains at about $10/ston or less.
Others, Including Klopfenstein (Nebraska) estimate this cost much higher, at $20 per ston or more.
Income tax model information applies to corporations as opposed to cooperatives.

MODEL RETURN TO IOWA PLANT UNDER VARIOUS ETHANOL, CORN, & DDG PRICES*

After Interest Costs and Incentive, Before Taxes

PRXfile:PRX_EthanolAnal_IA. PRXrev. 29-May-01. USDA: Jun-01. For GTB-01-05.

Ethanol Price, $/gal		Corn Price, US Price Received by Farmers, $/bu								Corn Price, US Price Received by Farmers, $/bu							
		1.70	1.85	2.00	2.15	2.30	2.45	2.60	2.75	1.70	1.85	2.00	2.15	2.30	2.45	2.60	2.75
		Corn Price, Plant, $/bu								Corn Price, Plant, $/bu							
US	Plant	1.63	1.78	1.93	2.08	2.23	2.38	2.53	2.68	1.63	1.78	1.93	2.08	2.23	2.38	2.53	2.68
		Return stated in $/gal								Return stated in $/bushel							
1.00	0.94	0.04	0.00	-0.04	-0.07	-0.11	-0.14	-0.18	-0.21	0.10	0.00	-0.10	-0.19	-0.29	-0.39	-0.49	-0.58
1.10	1.04	0.14	0.10	0.06	0.03	-0.01	-0.04	-0.08	-0.11	0.37	0.27	0.18	0.08	-0.02	-0.12	-0.21	-0.31
1.20	1.14	0.24	0.20	0.16	0.13	0.09	0.06	0.02	-0.01	0.65	0.55	0.45	0.35	0.26	0.16	0.06	-0.04
1.30	1.24	0.34	0.30	0.26	0.23	0.19	0.16	0.12	0.09	0.92	0.82	0.72	0.63	0.53	0.43	0.33	0.24
1.40	1.34	0.44	0.40	0.36	0.33	0.29	0.26	0.22	0.19	1.19	1.10	1.00	0.90	0.80	0.71	0.61	0.51
1.50	1.44	0.54	0.50	0.46	0.43	0.39	0.36	0.32	0.29	1.47	1.37	1.27	1.18	1.08	0.98	0.88	0.79
1.60	1.54	0.64	0.60	0.56	0.53	0.49	0.46	0.42	0.39	1.74	1.64	1.55	1.45	1.35	1.25	1.16	1.06
1.70	1.64	0.74	0.70	0.66	0.63	0.59	0.56	0.52	0.49	2.02	1.92	1.82	1.72	1.63	1.53	1.43	1.33
1.80	1.74	0.84	0.80	0.76	0.73	0.69	0.66	0.62	0.59	2.29	2.19	2.09	2.00	1.90	1.80	1.70	1.61
1.90	1.84	0.94	0.90	0.86	0.83	0.79	0.76	0.72	0.69	2.56	2.47	2.37	2.27	2.17	2.08	1.98	1.88
2.00	1.94	1.04	1.00	0.96	0.93	0.89	0.86	0.82	0.79	2.84	2.74	2.64	2.55	2.45	2.35	2.25	2.16
		DDG Price, US Lawrenceburg IN, $/ston								DDG Price, US Lawrenceburg IN, $/ston							
		85	93	100	108	115	123	130	138	85	93	100	108	115	123	130	138
		DDG Price, Plant, $/ston								DDG Price, Plant, $/ston							
		75	83	90	98	105	113	120	128	75	83	90	98	105	113	120	128

*Model results are speculative, relying on hypothetical future price differentials for ethanol, corn, and DDG.
Actual results will depend on actual prices, on location WITHIN state, and other variables.

SOYBEAN AND CORN NET EXPORTS (-) AND IMPORTS (+) FOR IOWA**

PRXfile:PRX_EthanolAnal_IA. PRXrev. 29-May-01. USDA: Jun-01. For GTB-01-05.

State	Soybeans as Grain, Crop Year 01-02								Soybean Meal, Crop Year 01-02							
	Carry-in	Pro-duc-tion	Sup-ply	Carry-out	Total use	Seed Resid use	Pro-cess-ing	Net Exp(-) Imp(+)	Pro-duc-tion	Fed in State: Dairy	Beef	Pork	Poultry	Other	Total	Net Exp(-) Imp(+)
	milbu	milbu	milbu	milbu	milbu	milbu	milbu	milbu	000st	000st	000st	000st	000st	000st	000st	000st
IA	71	514	585	118	279	25	254	-188	6038	78	314	1024	311	8	1735	-4303

State	Corn as Grain, Crop Year 01-02														
	Carry-in	Produc-tion	Sup-ply	Carry-out	Total use	Resid-ual use	Pro-cess-ing	Net Exp(-) Imp(+)	Feed use: Dairy	Beef	Pork	Poultry	Other	Total	
	milbu	milbu	milbu	milbu	milbu	milbu	milbu	milbu	milbu	milbu	milbu	milbu	milbu	milbu	
IA	566	1598	2164	528	1160	136	634	-476	20	114	211	42	3	390	

**Calculations are based on average US feeding rates, and do not include important local sources of protein and pasture.

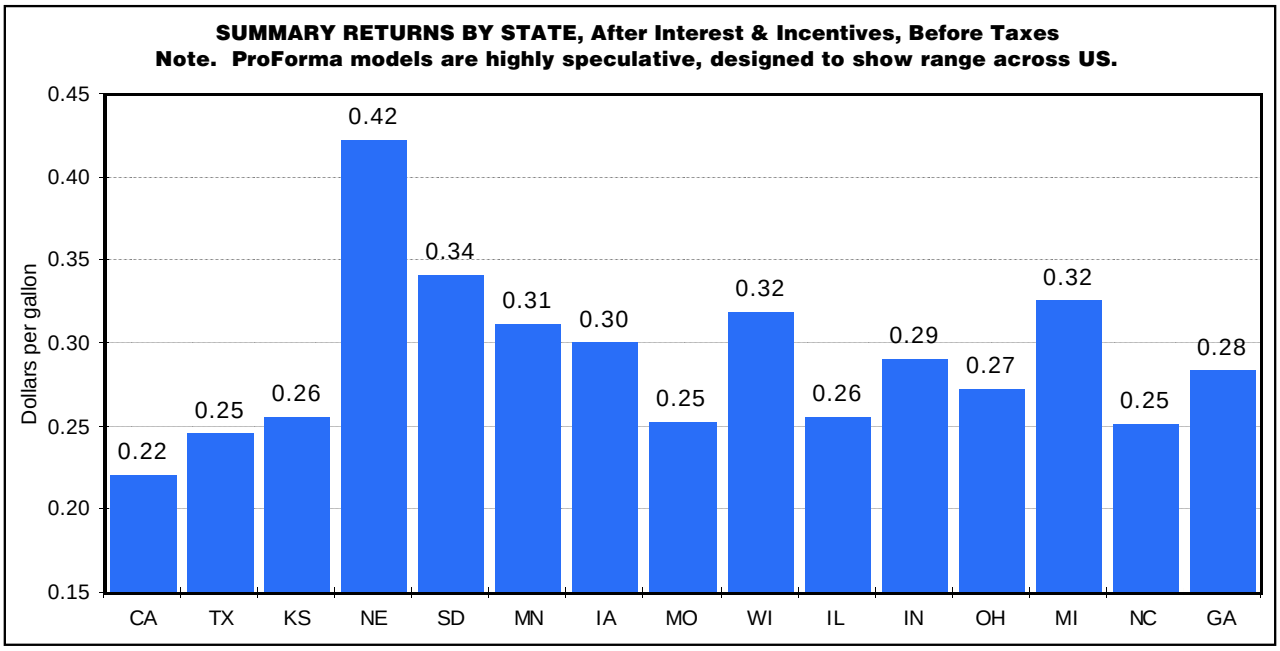
The sensitivity table above makes it very clear that an ethanol plant in Iowa, or anywhere else for that matter, is highly dependent on the combined forces of corn price, DDG price, and (today especially) ethanol price. The price of ethanol has recently declined from a high in the range of $1.70 per gallon to about 1.30, and such changes (up or down!) are no doubt a harbinger of the future. This changeability of factor prices makes it even more important to site additional plants for long range competitiveness, with respect to cheap corn basis and with respect to all other costs as well (such as power)—but also with respect to delivered prices of ethanol.

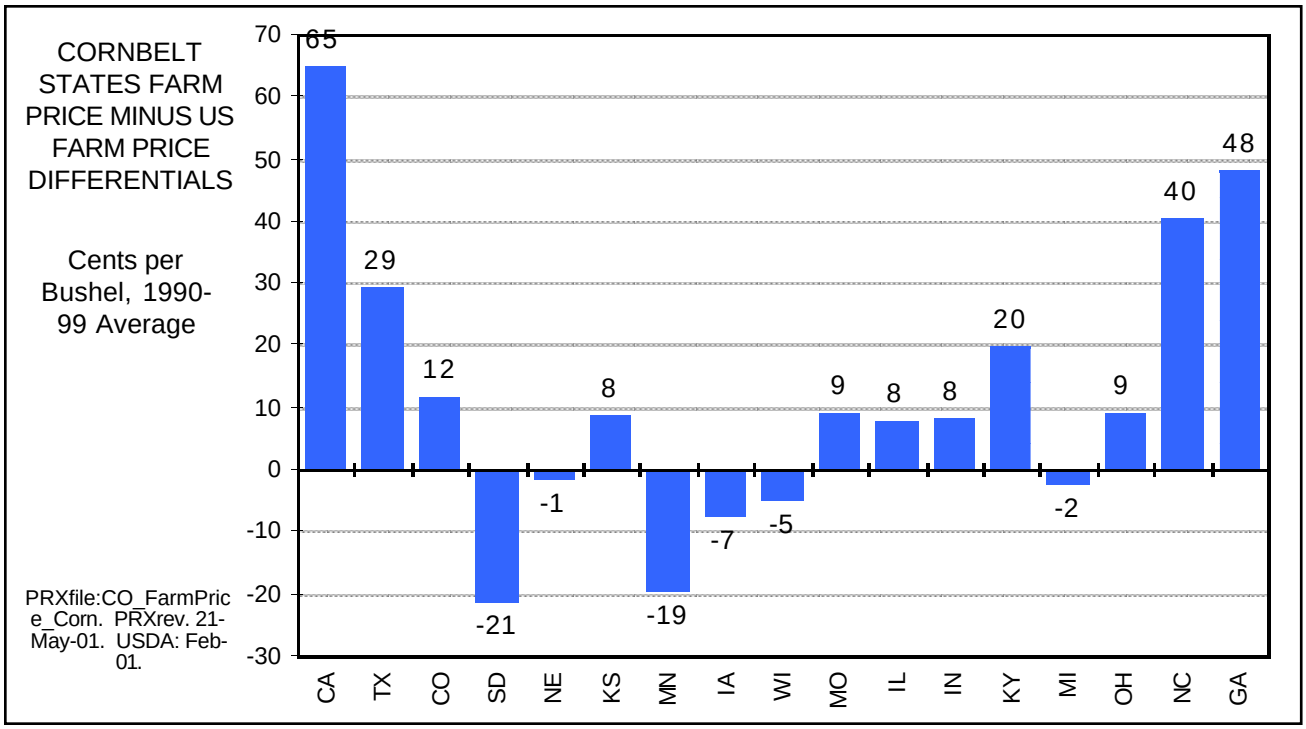
The next page shows a simplified analysis of state-by-state potential returns from a single 40 mil gallon facility. Some states, with either producer incentives or cheaper corn, rank favorably to Iowa.

SUMMARY ETHANOL ANALYSIS FACTORS & SPECULATIVE RETURNS BY STATE

PRXfile:PRX_EthanolAnal_CA. PRXrev. 27-Jun-01. USDA: Jun-01. For GTB-01-06.

	Ethanol Price			Corn Price			DDG Price			Oper Cost Prem	State Prdcrs Incntv	Return after interest & Producer Incentives	
	US	Prem	Plant	US	Prem	Plant	US	Prem	Plant				
	$/gal	$/gal	$/gal	$/bu	$/bu	$/bu	$/ston	$/ston	$/ston	pct	$/gal	$/bu	$/gal
CALIFORNIA	1.30	0.15	1.45	1.85	0.65	2.50	93	23	116	25%	0.00	0.60	0.22
TEXAS	1.30	-0.05	1.25	1.85	0.29	2.14	93	10	103	0%	0.00	0.67	0.25
KANSAS	1.30	-0.05	1.25	1.85	0.08	1.93	93	-10	83	0%	0.00	0.70	0.26
NEBRASKA	1.30	-0.07	1.23	1.85	-0.01	1.84	93	-20	73	0%	0.18	1.16	0.42
SOUTH DAKOTA	1.30	-0.08	1.22	1.85	-0.21	1.64	93	-10	83	0%	0.01	0.93	0.34
MINNESOTA	1.30	-0.08	1.22	1.85	-0.19	1.66	93	-15	78	0%	0.00	0.85	0.31
IOWA	1.30	-0.06	1.24	1.85	-0.07	1.78	93	-10	83	0%	0.00	0.82	0.30
MISSOURI	1.30	-0.05	1.25	1.85	0.09	1.94	93	-10	83	0%	0.00	0.69	0.25
WISCONSIN	1.30	-0.04	1.26	1.85	-0.05	1.80	93	-8	85	0%	0.00	0.87	0.32
ILLINOIS	1.30	-0.05	1.25	1.85	0.08	1.93	93	-10	83	0%	0.00	0.70	0.26
INDIANA	1.30	-0.04	1.26	1.85	0.08	1.93	93	0	93	0%	0.00	0.80	0.29
OHIO	1.30	-0.03	1.27	1.85	0.09	1.94	93	-10	83	0%	0.00	0.74	0.27
MICHIGAN	1.30	-0.03	1.27	1.85	-0.02	1.83	93	-5	88	0%	0.00	0.89	0.32
NORTH CAROLINA	1.30	0.03	1.33	1.85	0.40	2.25	93	10	103	10%	0.00	0.69	0.25
GEORGIA	1.30	0.04	1.34	1.85	0.48	2.33	93	30	123	10%	0.00	0.78	0.28





The state-by-state analysis on the previous page was made with the above corn price differentials for the states in question. The method of determining the differentials was simple—just the state's average corn price received by farmers minus the US price by farmers, averaged over the past 10 years. The detail for Iowa is show on the next page, page 45, along with the very longterm history of this price differential for the state.

Iowa's differential is about 15 cents below Illinois, which is the force which drives so much of Iowa's corn toward Illinois. The map on page 46 shows the price differential between Iowa and Illinois in more detail, at the PCP level, and from far western Iowa to central Illinois, the differential can certainly exceed the 15 cents mentioned above.

Suppose a massive amount of new ethanol were to be processed in Iowa. What would happen to the state's corn basis, and what would happen to the movement to Illinois? The models developed here, one ASD at a time, suggest that if an 80-million gallon plant were sited in each and every ASD (resulting in 720 million gals of ethanol, and using nearly 270 mil bu of corn), the basis impact on the entire state would be on the order of a 2 to 4 cent increase—all other things equal.

But note the relatively cheap sources of corn in the table above, for instance South Dakota and Minnesota. It must be assumed that a rise in Iowa's basis level would be met by more movement of cheaper corn from MN and SD into Iowa, and this effect was not modelled here. Pages 47-49 show the PRX Regional Corn Analysis System, with its core regions of the Upper Miss being supplied by western Iowa. The deficit of the entire Upper Miss region (as defined) is on the order of 800 mil bu, and the flow from west to east into this demand area is thus enormous. So long as Iowa gains a "fair share" of new ethanol plants (and not the above 720 mil gals, or enough for the entire California demand by itself), it seems likely that the flow from west to east into the River area will continue, and that the price differentials now in existence will basically remain. In other words, the above 2 to 4 cent estimate is optimistic in the extreme.

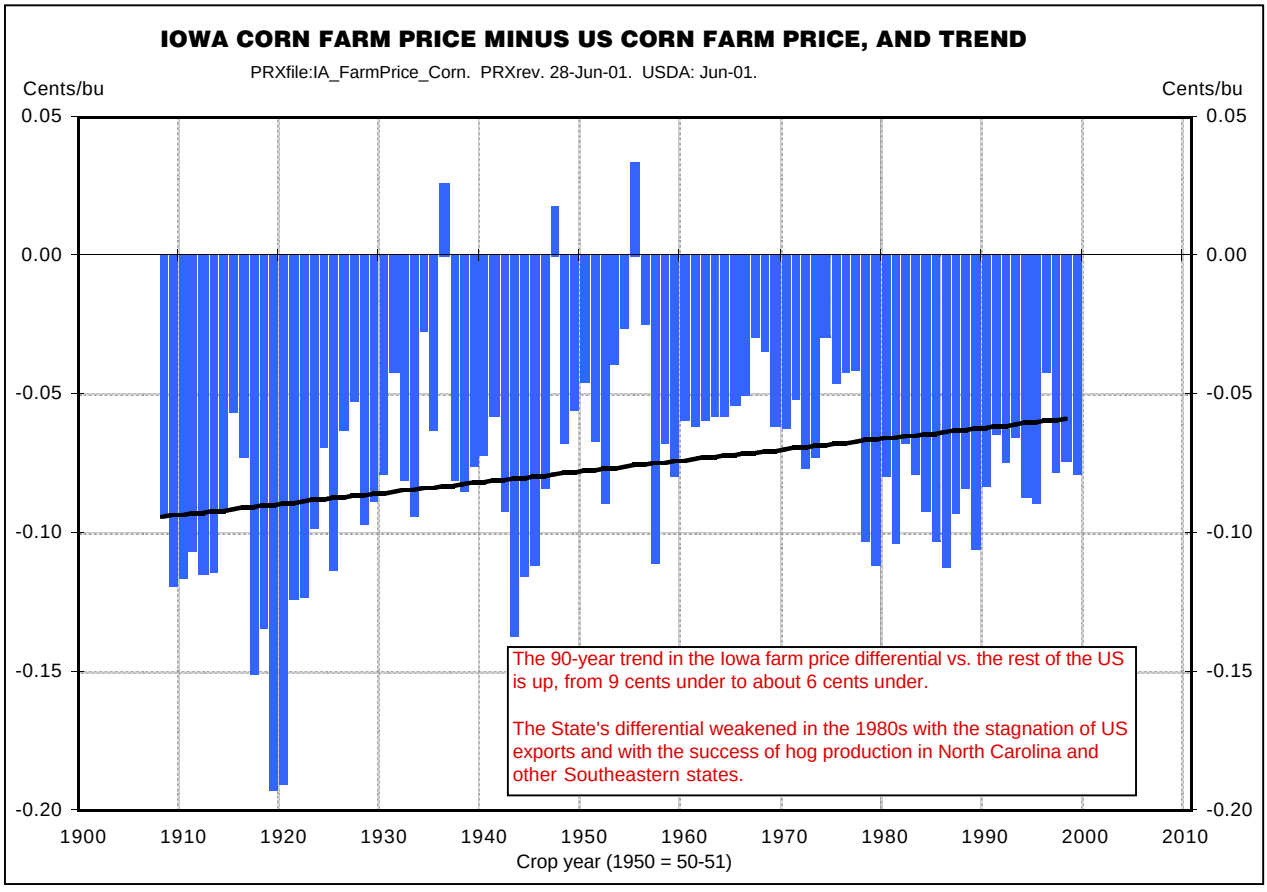
As mentioned previously, PRX has conducted many analyses for individual ethanol plants, and we have observed that when we confine our analysis to a smaller and smaller origination area (let's say one or two counties), the basis impact of any given amount of additional processing is higher. A 40-mil gal plant, in other words, can certainly have an impact of 10 cents locally, but this impact will not extend for hundreds of miles.

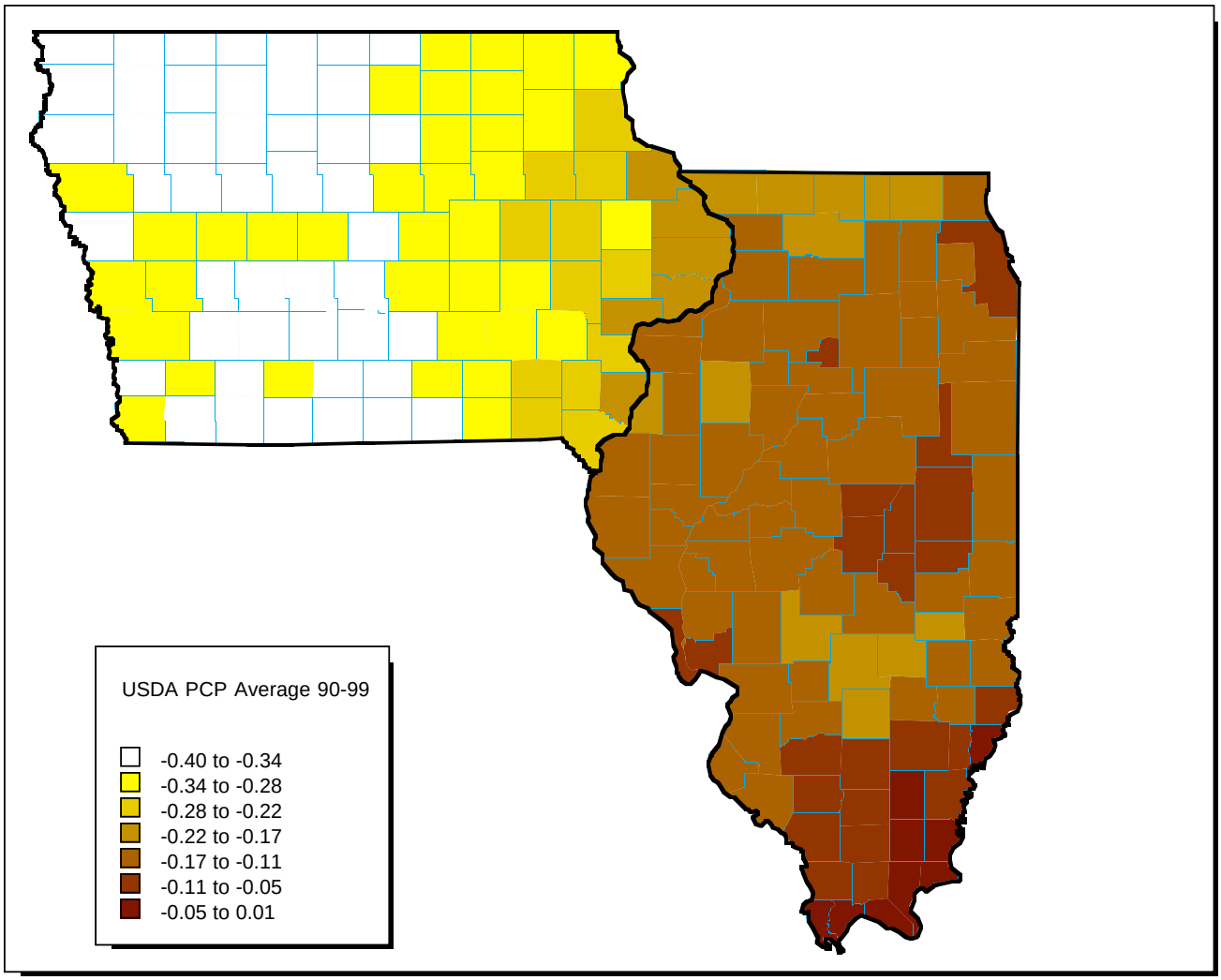
IOWA AVERAGE CORN PRICE RECEIVED BY FARMERS BY MONTH vs. US

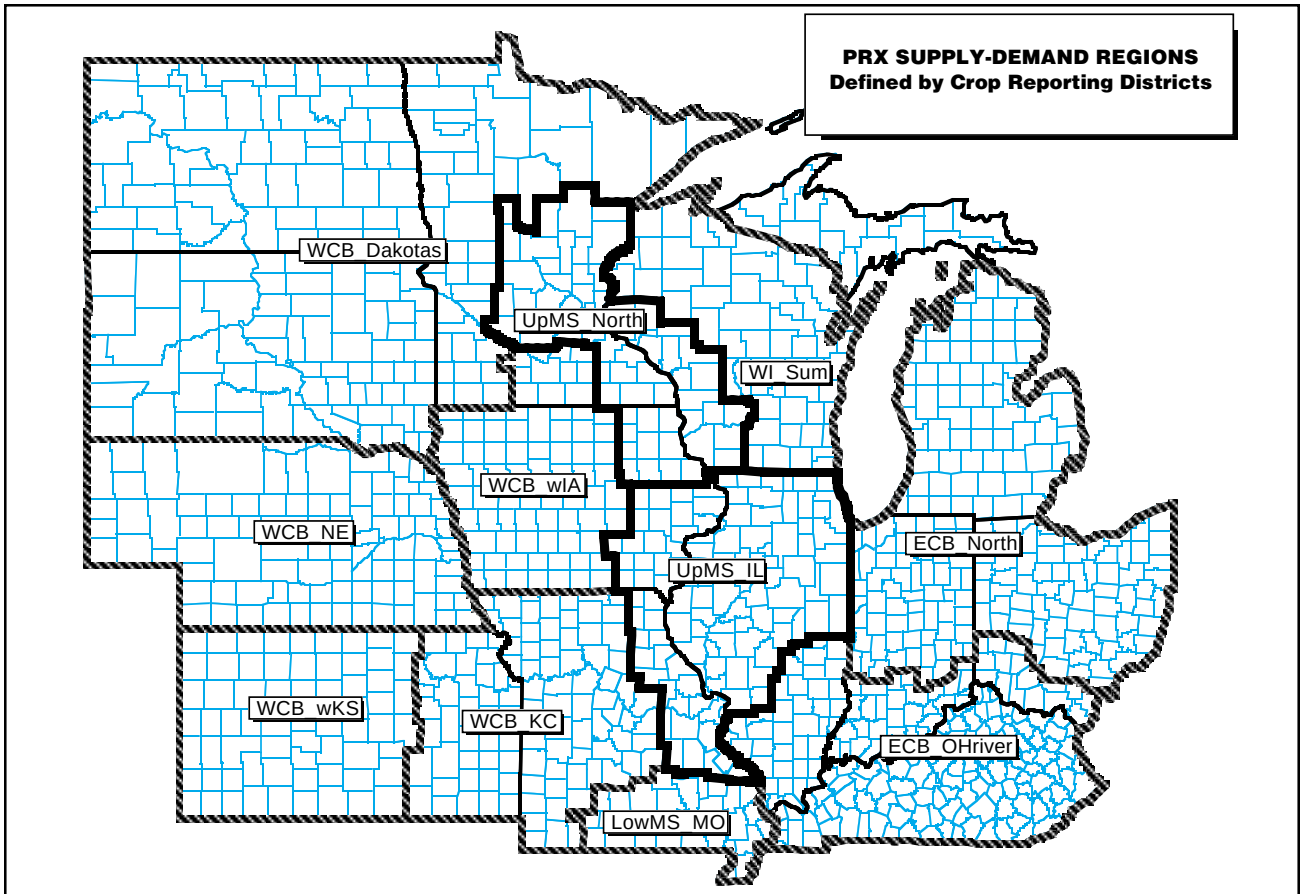
Monitor Table. PRXfile:IA_FarmPrice_Corn. PRXrev. 28-Jun-01. USDA: Jun-01.

Crop year	Farm Price as reported by USDA NASS Month												Average Sep-Aug	US Sep-Aug	IA minus US
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug			
	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu	$/bu
Iowa Average														USDA	
90-91	2.19	2.10	2.09	2.13	2.15	2.21	2.32	2.27	2.33	2.27	2.23	2.30	2.22	2.30	-0.08
91-92	2.25	2.23	2.25	2.26	2.30	2.40	2.48	2.44	2.42	2.41	2.26	2.06	2.31	2.38	-0.06
92-93	2.04	1.98	1.93	1.90	1.94	1.93	2.03	2.10	2.08	2.04	2.15	2.14	2.02	2.10	-0.07
93-94	2.11	2.19	2.40	2.65	2.66	2.72	2.68	2.60	2.55	2.53	2.21	2.07	2.45	2.51	-0.06
94-95	2.05	2.01	1.97	2.04	2.08	2.13	2.21	2.27	2.33	2.44	2.54	2.53	2.22	2.30	-0.09
95-96	2.60	2.71	2.78	2.96	3.00	3.25	3.33	3.66	4.02	4.08	4.39	4.46	3.44	3.53	-0.09
96-97	3.95	2.84	2.61	2.52	2.59	2.55	2.72	2.72	2.61	2.47	2.34	2.41	2.69	2.74	-0.04
97-98	2.44	2.43	2.45	2.45	2.44	2.47	2.47	2.37	2.28	2.20	2.03	1.81	2.32	2.40	-0.08
98-99	1.72	1.87	1.92	1.94	1.94	1.96	1.98	1.97	1.95	1.90	1.66	1.65	1.87	1.95	-0.07
99-00	1.59	1.58	1.64	1.77	1.76	1.91	1.97	1.98	2.06	1.86	1.58	1.44	1.76	1.84	-0.08
00-01	1.46	1.66	1.83	1.89	1.86	1.87	1.88	1.85					1.78	1.85	-0.07
															average 1990s
US Average*															
00-01	1.61	1.74	1.86	1.97	1.98	1.96	1.95	1.91							
IA minus US	-0.15	-0.08	-0.03	-0.08	-0.12	-0.09	-0.07	-0.06							

*For 00-01 the USDA in May-01 forecast a range of 1.80-1.90, which gives an average of 1.85.



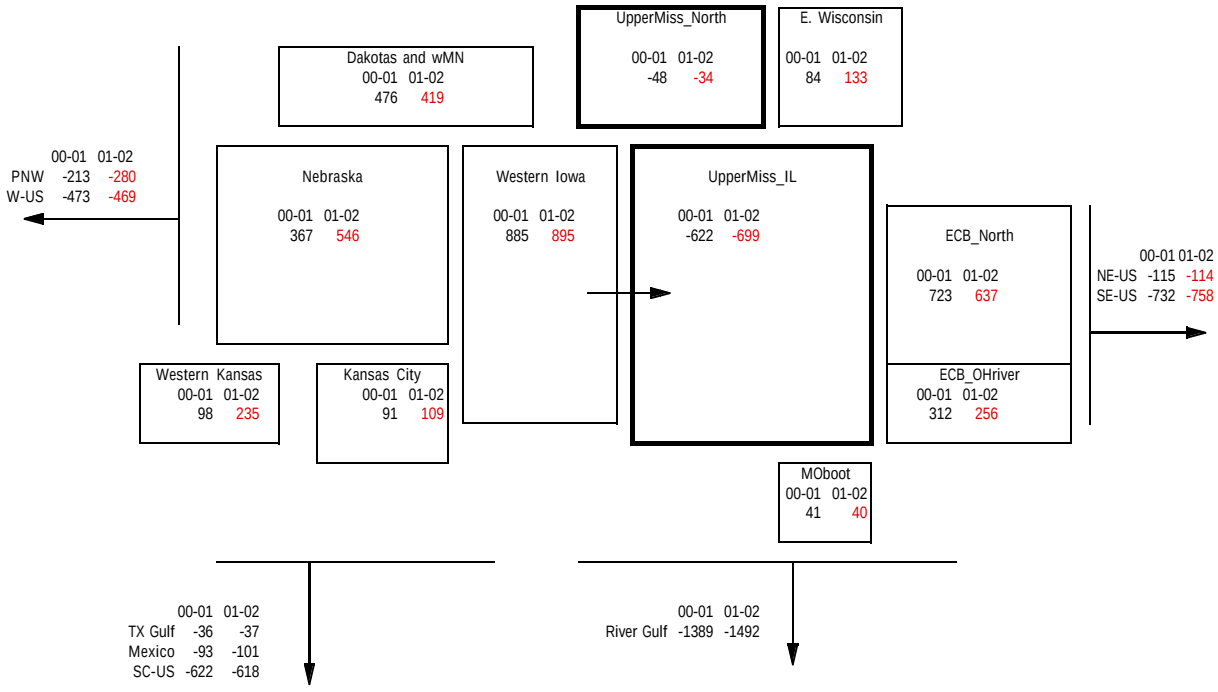




CORN NET EXPORTS (+) AND NET IMPORTS (-) OF MAJOR CORN ANALYSIS REGIONS

USING TRIAL FORECAST OF CARRYOUT-TO-USE RATIOS, AT "BASIS NEUTRAL"

PRXfile:CB_Prez. PRXrev. 12-Jun-01. USDA: Jun-01. For GTB-01-06.



CORN SUPPLY-DEMAND OF UPPER MISSISSIPPI & ILLINOIS RIVER REGIONS

PRXfile:CB_Prez. PRXrev. 12-Jun-01. USDA: Jun-01. For GTB-01-06.

Line	Region	Item	Crop year											
			90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02
			mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
1	**UpMS_North**	Carry-in	136	161	109	212	66	168	38	79	123	179	171	211
2		Production	598	600	582	322	685	570	628	644	727	704	655	608
3		Supply	735	761	691	535	751	738	666	723	850	883	826	819
4		Carry-out	154	120	186	75	158	39	78	123	181	176	206	174
5		Disappearance	581	642	505	459	593	699	588	600	669	707	620	645
6		Residual Use	61	48	57	21	70	11	67	62	49	63	57	53
7		Feed Use	256	274	259	265	259	250	243	234	231	227	223	211
8		Industrial Use	0	0	0	0	10	0	10	15	21	26	26	26
9		Barge Ldngs UpMS	316	315	226	270	305	502	331	324	414	401	362	389
10		Total Use	633	637	542	555	643	763	651	635	715	716	668	679
11		Net Exports (- = imports)	-52	4	-37	-96	-51	-64	-63	-36	-46	-9	-48	-34
12		Carryout pct Total Use	24%	19%	34%	14%	25%	5%	12%	19%	25%	25%	31%	26%
13	**UpMS_IL**	Carry-in	245	263	174	396	149	249	68	121	207	280	267	350
14		Production	1419	1241	1706	1225	1851	1164	1575	1517	1568	1549	1697	1587
15		Supply	1664	1504	1879	1620	2001	1413	1643	1638	1775	1829	1964	1936
16		Carry-out	272	176	385	148	262	65	120	209	285	271	345	289
17		Disappearance	1392	1328	1494	1472	1739	1348	1522	1429	1490	1558	1619	1647
18		Residual Use	144	99	168	79	191	23	167	146	105	138	148	137
19		Feed Use	253	276	252	263	243	220	205	204	200	189	186	185
20		Industrial Use	794	862	881	933	955	899	941	1024	1083	1098	1143	1151
21		Barge Ldngs IL & UpMS	762	734	706	488	809	816	731	679	827	812	763	873
22		Total Use	1952	1970	2006	1763	2198	1959	2043	2053	2215	2237	2240	2346
23		Net Exports (- = imports)	-560	-641	-512	-291	-459	-611	-521	-624	-725	-679	-622	-699
24		Carryout pct Total Use	14%	9%	19%	8%	12%	3%	6%	10%	13%	12%	15%	12%
25	**UpMS**	Carry-in	381	424	283	608	215	418	106	200	330	459	438	561
26	**Total**	Production	2017	1841	2288	1547	2536	1733	2203	2160	2295	2253	2352	2195
27		Supply	2399	2265	2570	2155	2751	2151	2309	2361	2625	2712	2790	2755
28		Carry-out	426	295	571	224	420	104	199	332	466	447	551	463
29		Disappearance	1973	1970	2000	1931	2332	2047	2110	2029	2159	2265	2239	2292
30		Residual Use	204	146	225	100	261	35	234	207	154	200	205	190
31		Feed Use	509	550	510	528	502	470	448	438	431	416	409	397
32		Industrial Use	794	862	881	933	965	899	951	1039	1104	1124	1169	1176
33		Barge Ldngs IL & UpMS	1078	1049	931	758	1114	1318	1061	1004	1241	1214	1126	1262
34		Total Use	2585	2607	2548	2319	2842	2721	2694	2688	2931	2954	2909	3025
35		Net Exports (- = imports)	-613	-637	-548	-387	-510	-675	-583	-659	-771	-688	-670	-733
36		Carryout pct Total Use	16%	11%	22%	10%	15%	4%	7%	12%	16%	15%	19%	15%
37	**UpMS**	Rail to RiverGulf from UpMS	164	156	199	193	212	127	80	89	105	107	121	126
38	**UpMS**	Net Exports (- = imports)	-777	-793	-747	-581	-722	-801	-663	-748	-876	-795	-791	-859

CORN SUPPLY-DEMAND OF WISCONSIN & WESTERN IOWA

PRXfile:CB_Prez. PRXrev. 12-Jun-01. USDA: Jun-01. For GTB-01-06.

Line	Region	Item	Crop year											
			90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02
			mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu	mil bu
1	**WI_Sum**	Carry-in	58	60	55	53	24	57	24	34	49	64	63	71
2		Production	234	254	203	140	306	241	219	271	270	272	242	265
3		Supply	293	314	257	193	331	298	244	305	319	336	305	336
4		Carry-out	59	55	54	22	58	26	33	49	64	63	71	59
5		Disappearance	233	259	204	171	273	272	210	256	254	273	234	277
6		Residual Use	24	20	20	9	32	5	23	26	18	24	21	23
7		Feed Use	112	117	118	118	118	119	120	120	119	118	117	112
8		Industrial Use	2	2	2	2	2	2	2	2	2	2	2	0
9		Chicago-Milwaukee Lakes	7	14	12	6	34	23	7	6	13	11	10	10
10		Total Use	145	153	151	135	186	149	152	154	152	155	150	144
11		Net Exports (- = imports)	88	106	52	36	87	123	58	102	102	118	84	133
12		Carryout pct Total Use	41%	36%	35%	17%	31%	17%	22%	32%	42%	40%	47%	41%
13	**WCB_wIA**	Carry-in	273	296	213	474	153	367	69	176	241	374	376	470
14		Production	1277	1153	1559	694	1570	1201	1423	1362	1482	1482	1458	1291
15		Supply	1550	1450	1772	1168	1723	1568	1492	1538	1723	1855	1834	1761
16		Carry-out	303	200	487	154	361	70	177	244	369	377	471	389
17		Disappearance	1248	1249	1285	1014	1362	1498	1315	1294	1354	1478	1363	1373
18		Residual Use	129	92	153	45	162	24	151	131	99	132	127	112
19		Feed Use	331	353	339	340	319	297	291	347	348	347	337	341
20		Industrial Use	0	0	0	0	9	6	6	6	6	8	13	24
21		Barge Loadings	0	0	0	0	0	0	0	0	0	0	0	0
22		Total Use	460	445	492	385	490	328	449	484	454	487	478	477
23		Net Exports (- = imports)	788	804	792	629	872	1171	866	810	900	991	885	895
24		Carryout pct Total Use	66%	45%	99%	40%	74%	21%	39%	50%	81%	77%	99%	81%
25	**WCB**	Carry-in	332	356	267	527	177	424	94	210	290	438	439	541
26	**WI & wIA**	Production	1512	1408	1762	834	1876	1442	1642	1632	1752	1753	1699	1555
27		Supply	1843	1764	2029	1361	2054	1866	1736	1842	2042	2191	2139	2097
28		Carry-out	362	255	541	176	419	96	211	293	434	440	542	447
29		Disappearance	1481	1508	1488	1185	1635	1770	1525	1550	1608	1751	1596	1649
30		Residual Use	153	112	173	54	193	29	174	157	118	156	148	135
31		Feed Use	443	470	457	458	437	416	411	467	467	465	454	453
32		Industrial Use	2	2	2	2	10	8	8	8	8	10	15	24
33		Lakes & Barge Ldngs	7	14	12	6	34	23	7	6	13	11	10	10
34		Total Use	605	598	644	520	675	477	601	638	606	642	628	621
35		Net Exports (- = imports)	876	911	845	664	960	1293	925	912	1003	1109	969	1028
36		Carryout pct Total Use	60%	43%	84%	34%	62%	20%	35%	46%	72%	69%	86%	72%
37	**Beyond ECB**	E-US from beyond ECB	-79	-225	73	13	9	51	-165	-95	-43	-98	194	60
38	**WI & wIA**	Net Exports	797	686	918	678	969	1344	760	818	959	1011	1162	1088
39	**UpMS**	Net Exports (- = imports)	-777	-793	-747	-581	-722	-801	-663	-748	-876	-795	-791	-859
40	**WI & wIA**	Net Exports beyond UpMS	21	-107	171	97	247	543	96	69	83	216	371	229